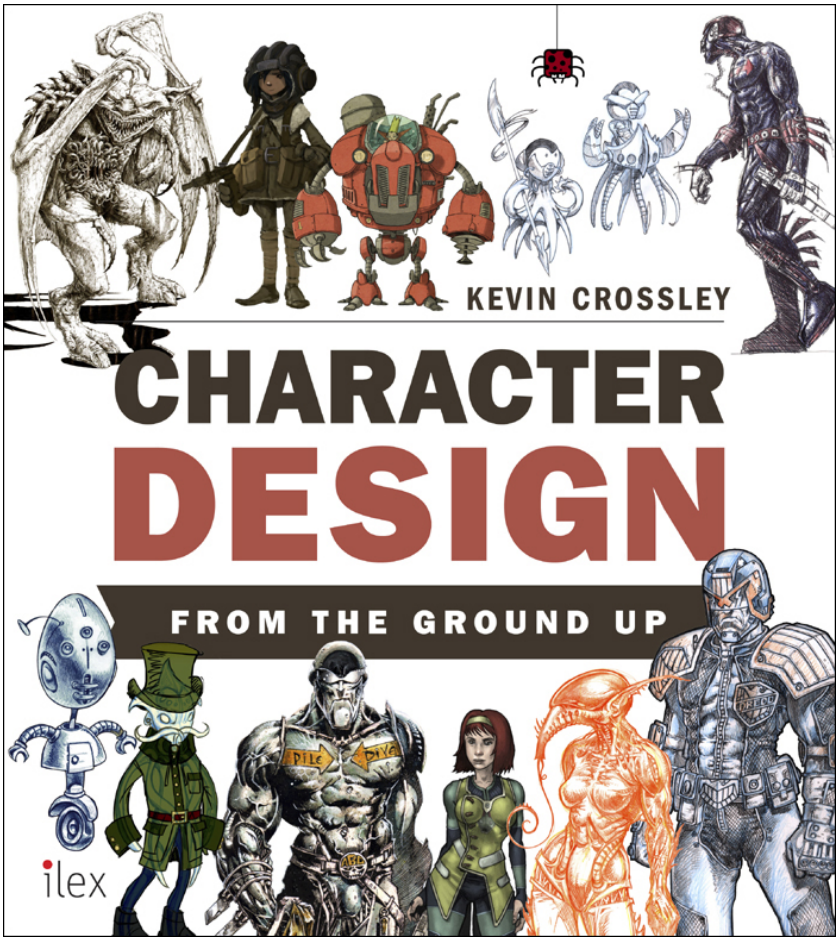
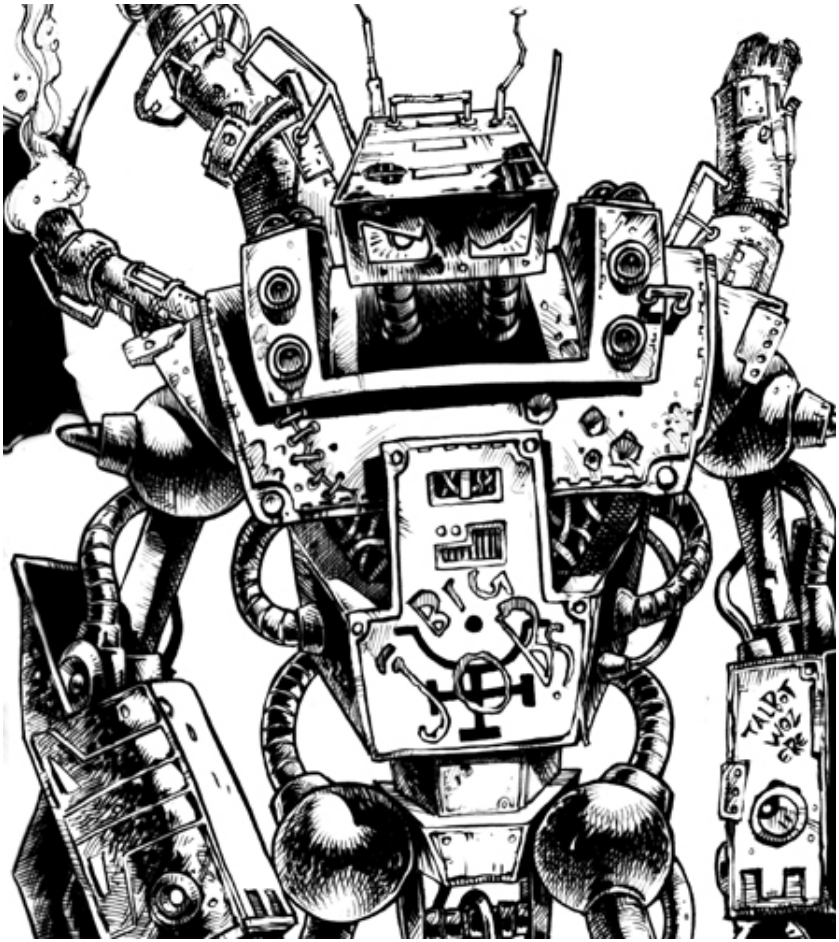

KEVIN CROSSLEY
CHARACTER
DESIGN
FROM THE GROUND UP
ilex



KEVIN CROSSLEY

CHARACTER DESIGN

FROM THE GROUND UP



ilex

Make your sketches come to life from films to games, books to comics, all stories need refined, beautiful characters. This book demystifies the in-demand discipline of character design, starting with the basics of material and equipment, moving on to sketching and 3D mock-ups with full turnarounds and lineups, and culminating in a series of in-depth case studies.

- Understand how world-class artists turn simple ideas into workable character designs
- Learn to negotiate with clients & win commissions
- Packed with lush, original illustrations of every stage of the process

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Preface

My initial thoughts when I began preparing material and subjects for a book concerning character design were, I suppose, similar in essence to many of the books, manuals, and guides that had inspired and influenced me since my childhood. Almost without thinking, I began to fall into a rhythm for the book that featured a list of chapters explaining and illustrating various topics concerned with the subject at hand.

Very soon though, it started to feel like nothing more than a tedious list of what to do and what not to do. Obviously, this sort of content is and should be at the core of any instructional book, but confronting a student or anyone keen to learn with a checklist of points to remember and emulate was never the best way to learn at school, so I wanted my book to avoid falling into the same trap. That said, it could still be argued that this "learn-by-list" technique is valid to a point—after all you do need to learn the basics from somewhere—but such a dry, factual approach can quickly become boring and even counter-productive. Most importantly, it can lack the expressive fluidity essential for making artwork that is as engaging and invigorating as it is informative and instructional.

Luckily, character design is a subject that lends itself well to a loose, creatively liberated approach. Throughout the chapters that follow are pages upon pages of instruction, guidance, and advice by seasoned professionals from a variety of disciplines. Advice from such experienced artists is essential in helping you develop and hone your own skills, but for every polished piece of "deliverable" artwork you'll see in the book, there are many more examples rendered in a looser style, complete with mistakes, thumb-smudges, and scribbles—all illustrating the fact that while a final character concept drawing might look amazing without a line out of place, it actually takes a lot of trial and error to achieve such a standard of finish.



This, then, became the most important aspect of *Character Design from the Ground Up*: to inform and instruct, but never at the expense of the excitement involved in creating a drawing from nothing but imagination. That is surely the reason we choose to practice art in the first place, and I hope this book manages to capture a little of that.

Kevin Crossley



Introduction

As children we all love to draw. In fact, some of us love to draw so much during our junior years, we don't see anything wrong with moving our epic doodles onto our bedroom walls when we run out of paper (sorry mom)! We love drawing characters more than anything else. Even before we become pre-schoolers, we learn to anthropomorphize the world we see, giving faces to trees and personalities to inanimate objects. It's a habit that evolves as we develop: we draw monsters and aliens, pirates and robots, witches and fairies, as well as ourselves and our families. We make up stories and populate them with these characters, creating epic little dramas as wild and innovative as our burgeoning imaginations, and when those drawings spill over page after page, they often do so accompanied by sound effects and outlandish gestures. A child will not think twice about doing any of this. It's in our nature; it's just the way our minds are wired.



The first characters I really loved to draw were invariably monsters of some kind!

This innate ability is encouraged throughout our early school years. Almost every subject features art or drawing as a natural aid to the learning process; in math and science classes we draw graphs, charts, and design experiments on paper, while history and geography are well suited for the young imaginer to explore those subjects by producing all sorts of artwork, including, of course, character art. And so our imaginations are perpetually engaged, our "pencil hand" gets regular exercise, and we never seem to run out of reasons to design and draw new characters.

However, as we get older, we become more self-conscious of our

drawings and less confident of our ability, particularly through our teenage years. This negativity is bolstered by the fact that as subjects at school become more academically focused, the art element that used to permeate through all is much reduced, and so many of us simply drift away from drawing. We leave school, get "real jobs," and "grow up."



A sketch idea for a mecha driver, influenced by Korean manga.

And yet, some of us never stop slinging graphite. We keep at it, practicing regularly, working hard—developing new characters and drawing our own versions of favorites from movies, comics, and TV shows. And if we do that with diligence and focus for long enough, we can eventually go on to produce illustrations and character

designs for a living.



This character concept shows how anatomy can be distorted, yet still seem logical.

All stories have characters, and whether it's a film, game, book, or comic, all characters need to be designed. Character design has become a distinct discipline in the entertainment industry, with character designers being employed by film and games developers across the globe to help bring to life scripts and concepts. A character designer jumps aboard a project in the very early stages and should inspire and motivate the team with visuals that can make or break an idea. Imagine a room, with ten members of a development team sitting around a table, and an art director says,

“We need a really big pirate captain with a beard, a long coat, a peg-leg, and a bad attitude.” Every person in the room will have a different pirate in their head; all the elements described will be there, but each one will be unique.

However, not many people around that table have the skill to pull that pirate out of their imagination and put it onto paper. This is where the job of the character designer is pivotal.

A character designer’s role is to put a drawing on the table, and in doing so give the team something visual to discuss. With an actual image of a pirate captain for everyone to look at—with some elements almost right and some wrong—a starting point is created, and the journey toward realizing the character can begin. From this first drawing, or series of drawings, the designer will get feedback and will be able to go away and make more drawings. There may well be hundreds of drawings, color studies, and designs produced over weeks, sometimes months, informed and influenced with frequent feedback and critiques. The process may involve a single character designer, or twenty, but gradually the big, bad pirate captain will evolve.

Pirate by Jonny Duddle:



1. The first sketch is in blue Col-Erase pencil on marker paper and is a quick exploration of the art director's description.



2. The sketch is scanned into Photoshop and desaturated. Using a Wacom Cintiq the artist then works directly in Photoshop to develop the rest of the Pirate Captain.



3. The line work is kept rough and loose with an aim to define the forms and volume in the body before being printed onto A3 paper as a template for a more finished drawing.

This is the process I'll be exploring throughout this book, and with a little help from professional concept artists working in a range of disciplines you'll learn how a character can be designed efficiently and effectively from the ground up. We'll look at a variety of subjects in different styles and approach each brief as a professional would a live project. To finish, there will be a series of nine Case Studies covering themes as varied as fantasy, history, steampunk, manga, sci-fi, and horror, with a particular focus on re-imagined versions of characters from the innovative science-fiction/fantasy comic *2000*

AD. Each case study will show each step of how a character is taken from a thumbnail sketch in a sketchbook to a fully rendered, finalized character concept.

Kevin Crossley & Jonny Duddle

1
THE BASICS



A Frame of Mind

This chapter originally had no more than four pages designated to it, as a succinct way to introduce the subject of character design before moving onto the meat of the book. However, as I began to think about the subject and how I wanted to approach it, many other ideas and relatable subjects became apparent to me, and as J.R.R. Tolkien famously said of his work, "the story grew in the telling." So, four pages became six, and soon enough another two were added, creating a bit of a monster of an opening chapter! However, the root of why we create is buried deeply, and a fair amount of digging is required before you can study and glean lessons from it. So get your shovel ready!

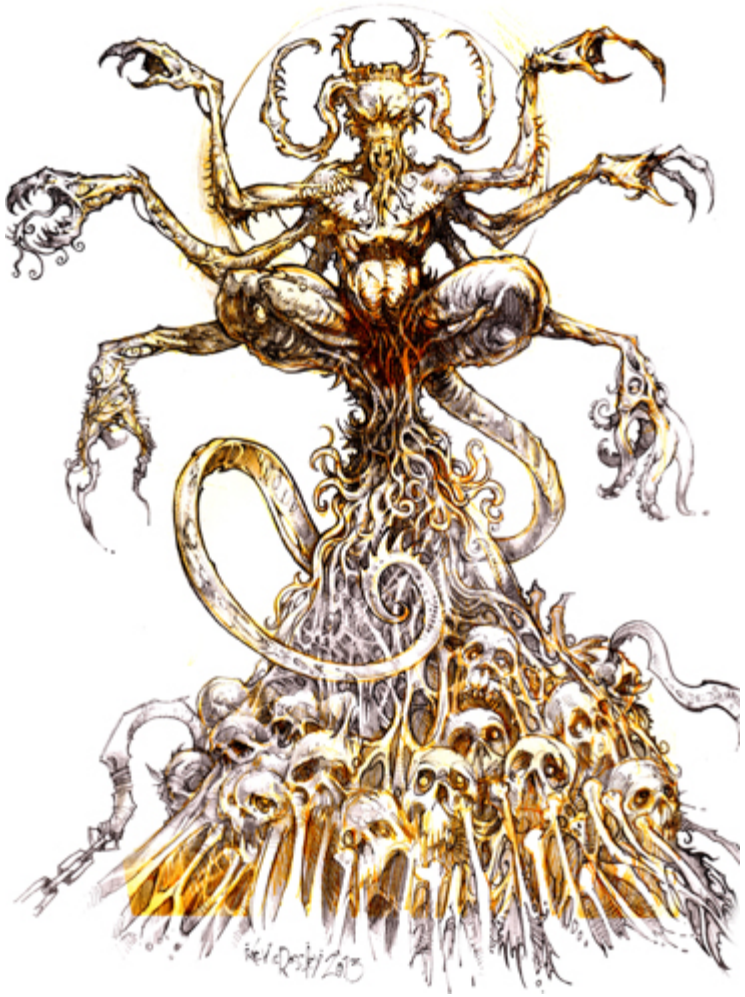


A miner gets ready to dig for inspiration.

The purpose of this introduction is to encourage you to open up your mind and get thinking, but to do so using angles that might seem less than obvious, or even a little bit abstract. To get into the headspace of a character designer requires that you first develop a comfortable understanding of your own artistic capacity, capability,

and drive; these personal defining attributes are the same for artists of all persuasions. Whether you're painting stylized landscapes with gallons of paint on the sides of buildings, or producing exquisite monster designs in pencil on a notepad while you chat on your mobile, the engine that drives that need to create comes from the same place. Understanding the machinery of that engine will enable you to access your creativity more readily. To stretch that metaphor, you'll be able to take it apart and use different aspects of it to suit a specific or specialized task.

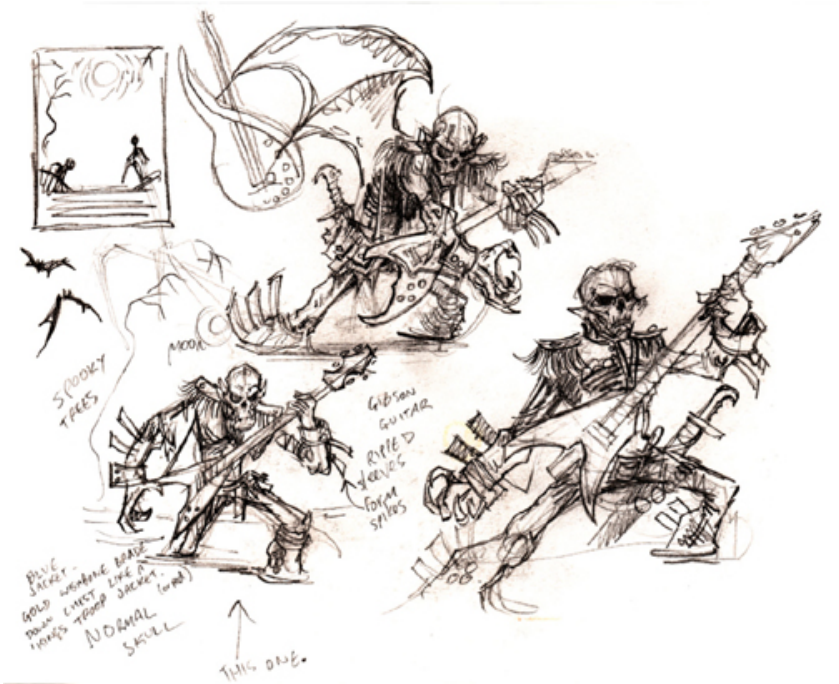
So to begin, I'd like to talk about music. (See? Abstract!) A musician can spend a lifetime learning how to play an instrument correctly, memorizing chord progressions and achieving mastery over it. But truly amazing, innovative music is only ever achieved by playing outside of these constraints. It is only when a musician understands the fundamentals that makes music work that they can then unlock the greatest secrets of creative expression: knowing how to bend or break rules with conviction yet retain the integrity of all the hard-won instruction that came before. The same can be said for all artistic endeavors, and it is no less true for concept/character design. Quite often, a project will require characters that are "hyper-real" or anatomically stylized in some way, and in these instances a designer must be confident enough in their understanding of anatomy that they can then twist, bend, stretch, or break it and still make it look functional. Amassing knowledge of a subject, and bolstering it with extensive theoretical and practical experience, demands a level of sustained commitment and concentration that can be difficult to maintain, especially when life has so many other commitments and distractions trying to make a claim on your time. Persistence will pay off, however, and there may come a point when everything seems to "click." When that happens, producing innovative character designs with a twist will come as natural as breathing!



A character design based on mixing elements from different mythological creatures.



An old “warrior musician” sketch makes the imagination start bubbling…



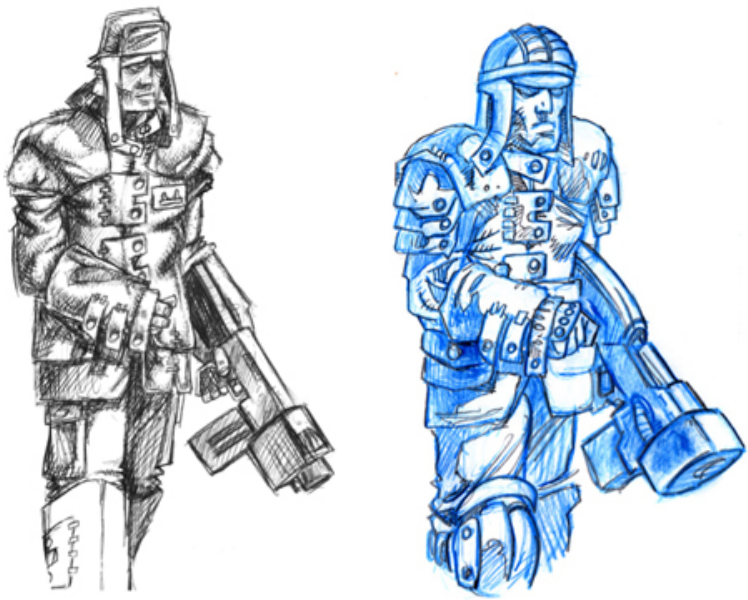
…and inspires a page of zombie guitar player designs!

The Learning that Never Ends

To achieve excellence as a designer you must begin with the understanding that it is only possible through diligent study, seemingly endless practice, and lots of reading. Your most important quest is simply to listen, collect, absorb, and experiment. The ability to listen is particularly important, which might seem obvious, but learning to really listen to other people is a skill many of us slowly lose as we grow older, so it is imperative that you keep that skill sharpened! If anyone with experience offers advice, instruction, or guidance, listen carefully and attentively, take notes, and evaluate thoroughly how you might allow it to influence your work. Even the greatest college courses are limited by the amount of time they have in which to impart knowledge, and when you graduate you'll find you have a lifetime of further learning stretched out ahead of you. Oh, the humanity!

Lessons can be drawn from many sources, even some that would seem to have no connection to your chosen subject, so learn to keep an open, inquisitive mind. You'll be surprised by the knowledge you'll gather along the way, and even more by the practical uses you'll find

for it. My own mantra as a young artist was something I first read on an "inspirational" office calendar: "Adopt, Adapt, Improve." Like many such quotes, it was perhaps a little bit pretentious, but nevertheless I turned those three words into a personal work philosophy, and it has served me well for twenty-five years.



Another childhood drawing of a future war veteran is turned into a brand new character concept (in blue).

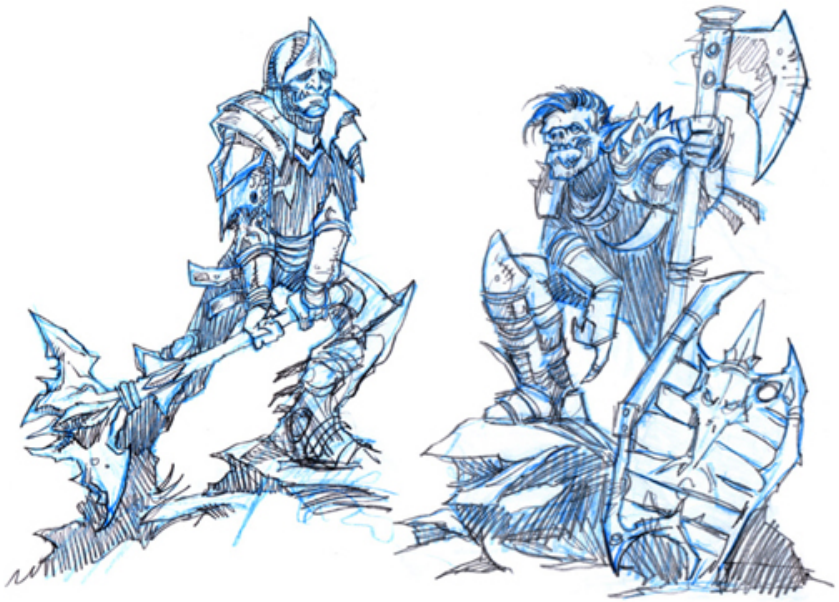
If all this seems a little expansive and non-specific, fear not! It's simply a glimpse of the bigger picture, the larger background that influences the smaller, more specialized disciplines we choose to practice. I have always believed that to properly understand a subject, you must also be mindful of where it sits in relation to everything else. Character design, while being a very specialized area of art, is no exception. It has close links to many other subjects, in particular life drawing and anatomy, and the ability to apply a solid understanding of these to your drawing is essential.

A Good Point of Perspective

Character design begins with the same basic character known well to those who practice life drawing, photography, or even writing and music: the human body. Everything we as artists create is produced in relation to ourselves. "Ah, but what about monsters?" I hear you cry! "What about other animals and creatures? They don't have

human bodies!" Well, that's true to a point, but every creature, alien, and beast design that has ever appeared in even the most fantastical of movies, games, or comics has been influenced or informed by creatures that live or have lived on this planet. It is, after all, our only point of reference! Also, remember that there is a good chance that each and every living thing on Earth shares a common ancestor. So, there should always be a dialogue between creature and character design, just as there is in the natural world. Understand this—practically and in abstract terms—and your character design will become so much easier and be invested with much more integrity.

In the chapters that follow you'll find plenty of straightforward instruction and guidance to help you develop your drawing skills and hone your design process. There are step-by-step guides too, of course, but you'll also find plenty of encouragement to simply go nuts and enjoy indulging in creative moments less constrained by dry factual instruction and more concerned with the equally important need for cathartic idea exploration.



Two pencil-sketched orc designs.



Finished pencil renders of the orc characters.



A finished illustration filled with varied goblins and orcs inspired by the two initial concepts.

Speaking of catharsis, take a look at the page of ballpoint doodling below. I spent two or so hours creating it one afternoon after a particularly frustrating day at work. It was 1995, I hadn't been

working at the video-game studio I was at for very long. As part of my job as a 2D-texture artist and level designer, I had to rely on software written in-house to carry out my work, and that particular day I'd been struggling with a recent re-build of that software that was full of bugs that made it crash regularly, often eliminating work before I'd have chance to save it! Eventually the programmer admitted there wasn't much point in my continuing to do any more work until he'd fixed his code, so I grabbed a scrap of paper and a pen and removed myself to the kitchen for a well-earned coffee, and while there I did this sketch. When I began, I was still a little hot under the collar, but by the time I'd filled the page I felt much better, my head of steam well and truly cleared. Randomized, directionless sketching like this might seem as though it functions as nothing more than a way to fill time, but I've since taken some ideas from these old doodles and turned them into finished concepts. So, character design starts with a blank page and the intent to fill it with ideas, but what inspires those ideas to flow can be as varied as the ideas themselves.



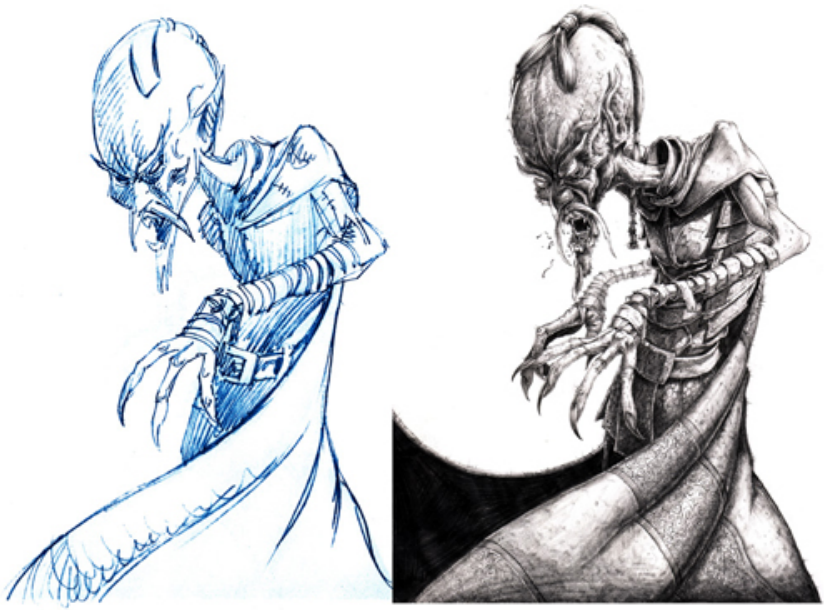
A sketchbook page filled with ballpoint doodling can be plundered for ideas years later!



A brand-new character concept inspired by an 18-year-old doodle!

I had an interesting conversation recently with an educational psychologist whose principal interest was how we in this country teach the under ten years olds. She told me something very interesting about how the perceptions of some children changed regarding how they saw art. As I've said, drawing is something we all do as children, but most of us simply grow out of it as our schooling becomes more academically focused. However, she'd found that many children, her eight year old daughter included, were beginning to see the act of drawing as a treat! Her daughter routinely asked permission to draw something, as if it wasn't something constructive to do with her time. Now, I have no idea how widespread this mode

of thought among children is, but I was surprised and a little saddened by this knowledge. Drawing is the opening salvo of all great design projects, a mark on blank paper is the start of a revolution, and everyone should be encouraged to do so in my book, and as this is my book, well, you get the idea!



A stylized vampire drawing, and the sketch which inspired it.



Multiple character designs produced using a character template.

Equipment, Materials, & Software

The range of art materials and equipment available is truly bewildering, and if I were to describe it all in detail, it would easily fill a book twice this size, with much still left to talk about. As a young designer it can be confusing, even daunting, trying to choose what to buy, let alone learn how to use it. Every concept designer and artist will spend years or decades experimenting with new brands and makes of brushes, pens, pencils, markers, and paints, and there are still new things to discover. Then there is the question of what the best paper is for any given job, and of course which software is best to use if you're working digitally.

Every designer and artist will eventually settle on a core set of equipment they feel most comfortable with. Each kind of brush, pencil, pen, or preferred coloring medium is a decision made after many months or years of experimentation, and every artist will have different preferences. However, it is always useful to find the time to try something new, if possible.

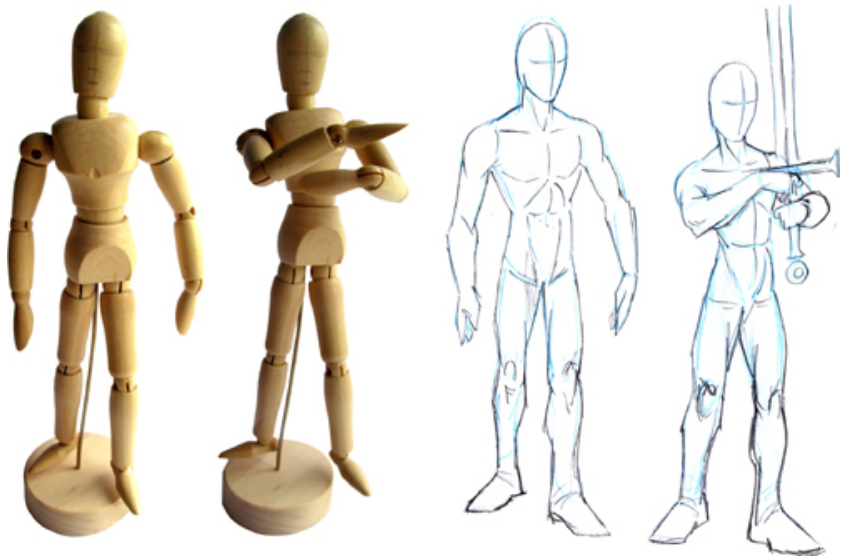


A good-sized storage box is a practical and tidy way of keeping all your equipment in one place.

Outside my studio, I produce most of my pencil drawings with my most important pieces of equipment: my favorite armchair, and my adjustable, table-top drawing board.







This wooden mannequin was super cheap, and is great pose reference.

For example, a few days after I'd written that last paragraph I was out buying some essentials for the house, and while at the convenience store, I walked past the stationery aisles where my attention was caught by a familiar object I'd somehow always ignored before. It was a small wooden mannequin. Now, these objects have been used by artists for years to create quick poses to work from, but they never particularly appealed to me, as the lack of articulation in their construction seemed likely to limit the range of poses you could get out of it. However, the store was selling these things for pennies, under a tagline that read, "Give it a go!" So I did. I bought one, and I've been using it as quick pose reference for the first time in my life. It really is never too late to try new things!

So, getting a little advice to help you make an informed decision about the best tool to get a job done will not only save you time, but money too, which is what this chapter is all about. I'll cover the equipment I use myself, and in particular that which is useful for producing concept art, but I'll offer a few suggestions for other materials and pieces of equipment that you might like to think about using. However, I wouldn't worry about trying out too many different options at once. Take your time to become familiar with a couple and experiment as you progress. It's sensible to apply this principle to other areas too: Don't clutter up your studio and head with too many

different choices. Sometimes a morning can disappear while you try to decide which drawing tool and paper will be right for a job. Trust me, keep it simple whenever possible.

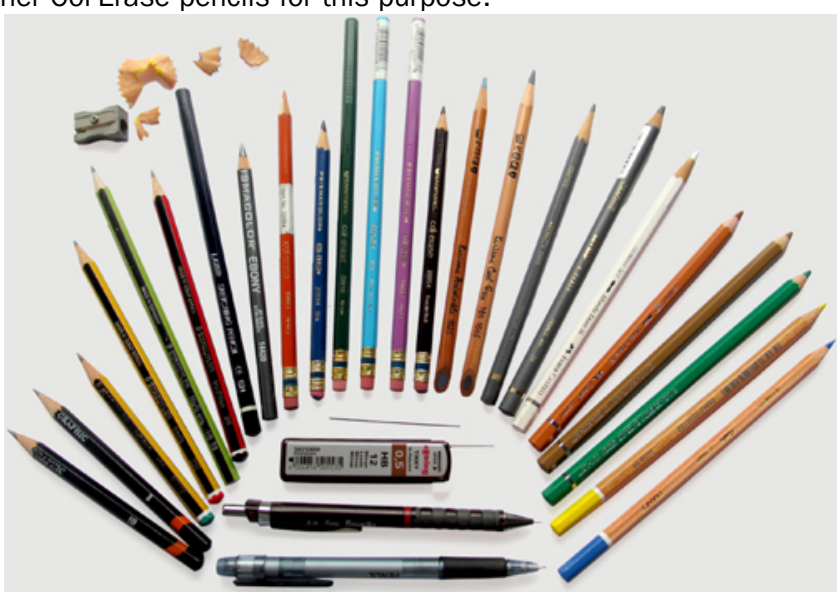
Drawing Equipment

Pencils

Pencils are the oldest and most commonly used drawing implement, and they are my favorite by a mile. I use Staedtler Tradition and Noris pencils, which come in a wide range of hardnesses, starting at 6H (hard tip with light gray color) to 6B (soft tip with dark black color). There are other brands that offer even more degrees of hardness, but I favor 2H for tight line-work, with HB for thickening outlines and 2B to add depth to shading. I also use a Prismacolor Ebony Jet Black pencil for shading large areas.

I occasionally use a Rotring Tikky automatic pencil, which I've found invaluable for use on pencils that will later be inked (particularly useful for comic work). These kinds of pencils are made by many manufacturers, and usually offer a stable size of drawing tip that's useful if you need to keep uniformity throughout your line-work.

During my time in the computer games industry I worked with many animators, and I picked up the habit of using blue Col-Erase pencils to do an under-drawing. This provides a great base sketch, which can then be finished with regular pencils. I also use orange, green, and other Col-Erase pencils for this purpose.



A small assortment of the various pencils I use.

Pens

I still use an almost countless variety of black-ink drawing pens, but ninety percent of the time I prefer to use the Edding Profipen and Staedtler Pigment Liners, from grade 0.05 to grade 0.5. I also use a Pentel Brush pen, as well as Sharpie markers, and a dip-pen and brush with black India ink. (Or any ballpoint or writing pen that comes to hand!)



A small selection of the different pens I use.

Erasing

For pencil work I use a variety of erasers depending on the job and finish I want to produce. A standard hard eraser will lift pencil away efficiently, but a soft-putty eraser will allow you to mold it into any shape you need for precise erasing. It is also useful for creating textured effects and finishes, and doesn't rub to pieces on the paper, so it's a bit less messy too. Electric erasers are also useful for both tidying up pencil art and creating interesting effects.

If I want to erase ink lines I use white ink applied with a fine brush or dip pen, and a Uni-ball Signo white-ink pen if I want to erase in a more textural style. With practice it's possible to really enrich your inking technique using these items!



Erasing can be achieved using a variety of techniques.

Rulers & Guides

To produce neat, tidy, finished art, a good set of drawing guides is essential. These are usually made of tough plastic (sometimes metal or even wood) and can be acquired relatively inexpensively. Items I would recommend that you look for include: rulers, French curves, protractors, set-squares, circle and ellipse guides, and, of course, a compass!



A selection of guides.

Paper & Art Board

By far the best paper I've found to draw on is Bristol Board. It is available in letter and tabloid (A4 and A3) books, and offers a smooth, pure-white surface that takes pencil and ink supremely well. There are also many fine quality sketchbooks and pads available, along with textured and colored card and board, layout paper, and many other options. I also use medium weight printer paper if the need arises, which is certainly the cheapest option too!



Just some of the kinds of paper and art board available in book and pad form.

Working Digitally

Although I prefer to work traditionally, it is possible to work exclusively using a computer if you wish, and there are some great pieces of software available. I use Photoshop for all my digital-art requirements, but I would advise using a fast computer, with as much RAM as possible, and a good graphics tablet. The Wacom Cintiq is highly recommended by many artists I know, but they can be expensive, and personally I get by just fine using a regular Wacom tablet.



I use a desktop PC to do all my digital work, organized into a very simple layout and setup.

Adding Color

When you need to add color to finish and present a concept, I've found that Photoshop is the best option if you want to get it done fast and retain as many color options as possible at every step of the way. However, it is much more fun, and to my mind much more satisfying, to produce artwork that is traditionally colored, and to do this in my concept design work I use Cotman Artists' watercolors, Windsor & Newton colored inks, colored watercolor pencils, and numerous brands of colored markers. If I have the time, it's fun to break out the airbrush, but tight deadlines don't always

accommodate such luxury! When using watercolors and inks, I use the following brushes:

- Cotman Watercolor Brushes: 000 to 3 sizes
- Windsor & Newton Sable Brushes: 00 to 2 sizes
- Pro Arte-Prolene brushes, various grades
- Windsor & Newton Synthetic Blend size 6
- Windsor & Newton Synthetic Blend size 6 Flat
- Windsor & Newton Sable size 9 Flat
- Windsor & Newton Fine Hog size 12 Long Flat … and a very old toothbrush

Once again, I would advise keeping the amount of equipment and materials you use fairly simple, and add to them gradually, but I would encourage everyone to explore the many varied aisles of your local art store.



A very small selection of my paint brushes.

A selection of inks and paints for use when traditionally coloring an image.





Out & About

And finally, remember to always take some means of sketching and writing with you wherever you go. A small notepad or sketchbook is all you need to ensure you always have the capability to instantly jot down any great idea you might have, or to make a quick sketch if you happen to see something or someone who might inspire a cool design. Most computer tablets can also be used to make sketches and jot down ideas too of course, but, you've guessed it, I prefer to work traditionally if possible, and I tend to have a notebook of some kind stashed away in all of my jackets and bags. Quite often I forget about them during my day-to-day work, but it's always interesting when I do rediscover them, as those ideas you have on the fly can sometimes be just the thing a project or job needs!

A selection of notepads and sketchbooks, as well as a travel case full of pencils.

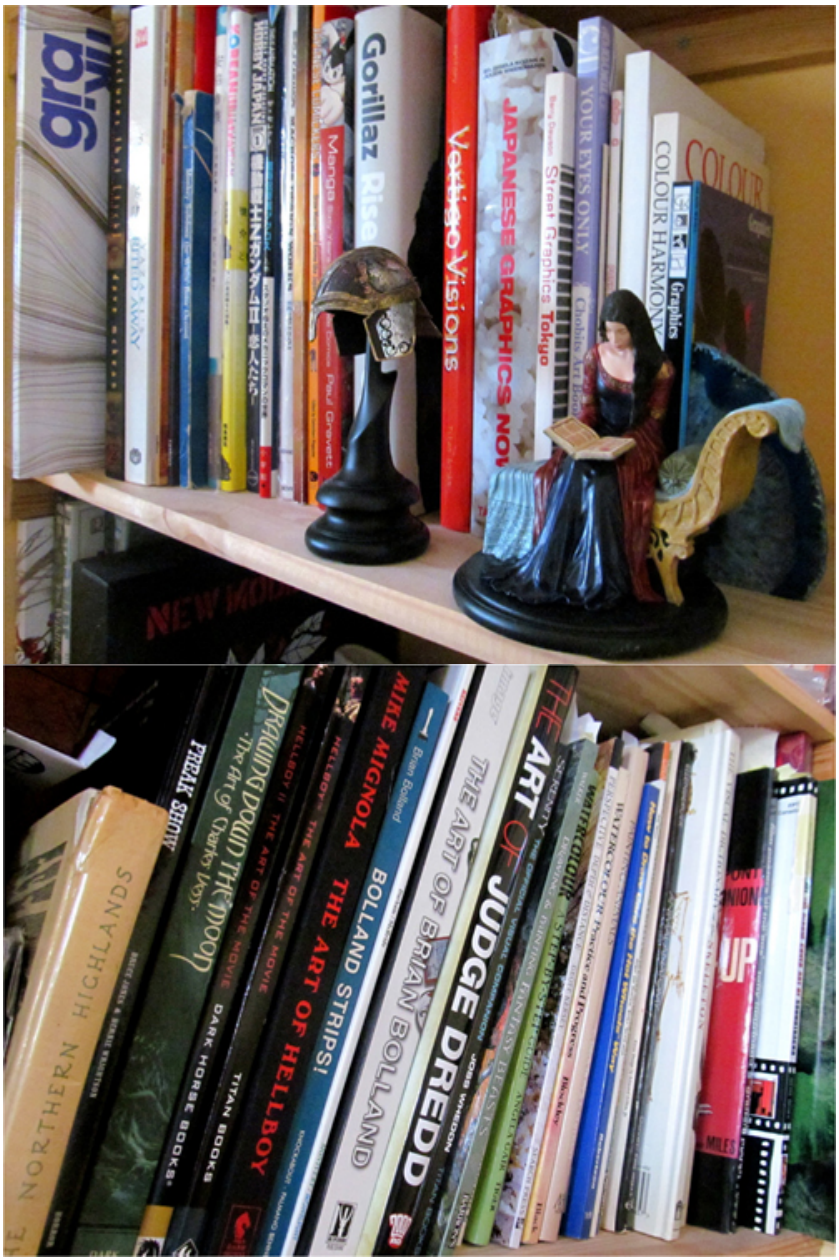

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COL-ERASE
2004
Helix
OXFORD
SOUTH
KF01108
QCONNECT
STAEDTLER
Noris eco
HB
MIRROR.
STUMPY MESS.
Blue Monday
The ONE DAY collection
After Kim has successfully
her dinners rebellion for parents
Learn
don't play with your food

Building a Reference Library

It might seem a little redundant to talk about how to build a reference library, let alone devote a whole chapter to it, but by the time you've read the following paragraphs you'll find there's more to building a library than you might have thought! As a schoolchild I used to love our regular Saturday morning visits to the local library. I lost myself for hours among the towering shelves crammed with more books than I could ever hope to own myself—or so I thought. Without realizing it, I would soon begin to build my own, specialized library at home.

As I became interested in art, particularly fantasy art, I asked my parents for particular books as Christmas or birthday presents, and by the time I was fourteen I had around ten books with art by amazing people, including Rodney Matthews, Boris Vallejo, Roger Dean, Frank Frazetta, Bernie Wrightson, and many others. However, I was also reading and collecting comics such as the weekly British sci-fi/fantasy anthology *2000 AD*, *Asterix*, *The Beano*, and US superhero comics, along with numerous technology, encyclopedia, and movie magazines, and that small collection of printed material formed the kernel of the expansive library I have today.

Graphics, manga, and movie-poster books are all useful reference.



Books that tell how movies and video games are made are full of concept art, and an essential part of any designer's library.





An assortment of art history, photography, design, architecture, and natural-history books.

Over the years, I've expanded it with books about anatomy, perspective, dynamic drawing, color and light theory, and many other practical art subjects, alongside many other subjects. The most useful books for concept-art reference are the "Art of" movie books. They come in many formats, but the best ones are always stuffed with amazing character, vehicle, and environment art—from pencil

sketches to fully colored paintings—and I continue to find them essential references whenever I begin a concept art project. There are also concept art books available for some video games that are similarly useful, and occasionally producers of TV shows make their production art available in printed formats too.

Also, although solid knowledge of anatomy and figure drawing is important, photographic body reference can be invaluable help when devising a composition, and this is where fashion and body-building or keep-fit magazines can come in handy. Hair care, beauty, and music publications also offer a broad selection of ideas that can influence your concepts too. Movies of gymnasts and athletes performing their sport can be useful in the same way, so I also have a collection of footage from recent Olympic or athletics/gymnastic events, as well as an extensive library of DVD movies, TV shows, and natural history programs.

For animations and projects that require exaggerated, unreal versions of a standard body shape, comics and graphic novels are invaluable. The stereotypical superhero human usually presents an idealized caricature of what the “perfect” form is: long legs, perfect physique and features. While this approach isn’t suitable for all design projects, it is definitely worth studying and practicing. It’s interesting to note that in fashion photography, perfume/beauty product advertising, and movie poster design, it is standard practice to alter and deform body shapes to suit a similar cartoon ideal.

Collectible statues, such as those made by Weta Workshop for the *The Lord of the Rings* and *The Hobbit* movies, are excellent for 3D-character reference.





A well-organized bookcase filled with comics and graphic novels, including titles by *2000 AD*, Marvel, DC, and assorted others.



Another pair of Weta Workshop collectable statues stand guard over a small selection of DVDs, which includes movies, TV shows, animated features, and various documentaries.

So, you might well be on your way to building up an impressive library of art and design history books, comics, magazines, and DVDs, but there are other things you can add to your resource library. Obvious additions to consider are natural history books and DVDs. When I was very young, I saw a show on TV called *Life on Earth*, an epic series covering life in all its varied and wondrous forms from across the globe, and I was hooked. I became interested in how animals and plants adapted to their environment and how their environment and feeding requirements might influence their physical shape. This

would gradually take root in my mind as a mantra that would influence me whenever I came to design a creature or character: function defines form. While it might be easy to simply make something up, it will add so much more depth if there is some reasoning behind your design decisions.

Botanical subjects are useful too. The world of plants, lichens, and fungi is populated by countless weird and wonderful organisms, and incorporating these sorts of attributes into creature concept design can result in some freakishly unique creations. I also sometimes draw abstract inspiration for character design from TV programs about physics, geological history, planetary evolution, cosmology, and other such subjects. Really, you can press almost anything into service in your character designs if you put some thought into it!

Toys are worth thinking about as well. Remember all those robots, dinosaurs, animals, monsters, and soldiers you played with as a kid? They were physical cues to get your imagination sparking, and they can still be used in the same way in your design work. So you have all the excuse you'll ever need to track down all your favorite childhood treasures, and put them to new, constructive uses. I sometimes use toys and models to create a diorama or 3D composition, then photograph it from various positions and angles until I find one that I can base a drawing or 2D composition from. It's an old established tool used by many of the designers I was influenced by, but it also gives you the opportunity to get away from the computer or drawing board for a while, and indulge in a different, more tactile kind of creativity, which is as useful as it is fun!



Natural-history reference books can add a unique dimension to your character designs.

The same can be said for model kits, and I still draw inspiration from some of the kits based on those fantastic old Japanese Mecha shows, such as *Gundam*, *Mospedea*, and *Macross*.

Photographs are also essential, and I not only have hundreds of old photos taken using old film that date back to the 1980s, I have tens of thousands of digital photos organized by month and year in a directory on my computer. They are great for inspiring ideas and very useful for adding textures when working digitally.



Mythology and military history are very useful when designing warriors and fantasy subjects.

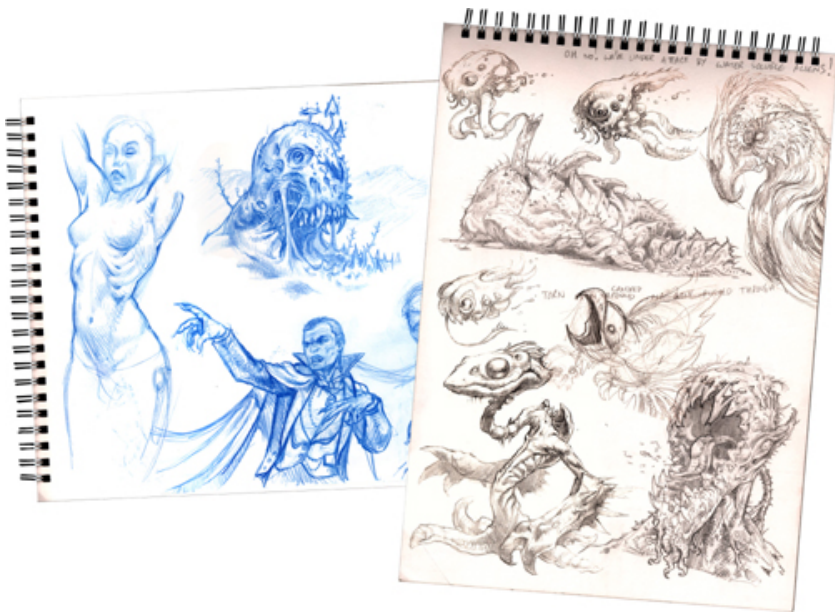
One last source worth a mention is the collectible card games that are as popular today as they've ever been. Perhaps the best known is *Magic: The Gathering*, and during its twenty-year lifetime it has produced some of the most consistently amazing character design available anywhere. It never ceases to amaze me that the designers and artists involved manage to continue presenting the same species and characters in fresh guises.



Model kits can help develop your understanding of 3D volumes when designing characters, and are good fun to build too!

Keeping a Sketchbook

During my time working as a concept designer for a computer game studio, I became disheartened by the fact that many of the younger artists who came to work for us didn't keep a sketchbook, and some never worked traditionally at all. Obviously, an artist can still express themselves creatively using purely digital media, and there are many analogous connections between the two approaches, but there are certain attributes real pencils or pens can bring into the creation process that digital simply cannot replicate. I decided I'd try to rectify this turn of events by handing out free pencils and sketchbooks.



This is how many mornings begin.

Now, even though an idea can be sketched out on any scrap of paper, paper bag, beer-mat, or envelope that comes to hand, a sketchbook is the most practical way of keeping a "visual diary" or journal of your ideas and designs. Filling consecutive sketchbooks is also a great way to keep a track of your artistic development, something many artists neglect to do. At a glance, your improvement can be assessed sketchbook by sketchbook, year by year, and should your morale ever dip with regards the validity of your work, just take a look back at what level you used to be at to get an instant indication of how much you've developed.

One of the most invaluable reasons for keeping sketchbooks,

however, is to have easy access to all those ideas you've had over the years. We all know how quickly a computer drive becomes filled with folders upon folders of images and drawings, and it's so easy to lose track of where anything is. With sketchbooks, you don't really have this problem. You can't hide a sketchbook inside another sketchbook, and neither can you accidentally delete them!

I now have a shelf filled with sketchbooks, notepads, journals, and scrapbooks that go back twenty-five years, but it wasn't until my final high-school art exam in 1990 that I began to see the sense of keeping a sketchbook. I produced a painting under controlled conditions that I made up from scratch on the day, but I had to provide preliminary sketches too. This wasn't something I'd ever done, so I stretched the definition of "preliminary" by producing them afterwards. In doing so, I developed some alternative ideas that would have made my finished painting much better, but it was of course too late. After that I made a point of making preparatory studies and sketches of things before I committed to a finished drawing. As a result, I found my understanding of anatomy improved, and I was able to choose better poses for my characters from the variety of sketches I'd produce beforehand. When I invested in my first sketchpad, the sheer newness of it seemed to instill a greater purpose to my drawing, which in turn inspired me to take it all a bit more seriously. It seemed to make a difference having a number of sketches all together in one place; the evolution of an idea was more visible somehow, plus I got faster at exploring those ideas. It certainly didn't make me a better artist overnight, but it made me to strive to become one.



A small selection of my sketchbooks, spanning 25 years!

Fill a Page a Day

This is my favorite drawing exercise, and the one I try to pass on at every opportunity. Even if you take nothing else from this book, you must try this at least! It's a task I used to set myself when motivation was running a little low, which was to try and fill a page with sketches and ideas every day. It might sound easy, but there are times when the last thing you feel like doing is picking up a pencil, because it might start to feel that whenever you try to draw you don't produce anything of much value or worth. This can lead to a terminal erosion of confidence and times like this are precisely when you need to be making yourself work. At least, that's what I used to tell

myself! It's a great exercise to set for yourself, it improves focus, gets your imagination sparking, and you end up with pages and pages of material that you will probably find uses for down the line. Indeed, quite a few of the ideas and concepts I've used in my recent books and projects began life as sketches in a sketchbook from twenty years ago, and there are still hundreds of other concepts and sketches I've yet to rediscover and find uses for. So not only is it incredibly gratifying to keep a sketchbook, in time the practice becomes a vindication of all the effort you spend filling them. But remember this: It really does not matter how good or bad the sketches you produce are. I cannot stress that enough; all that really matters is that you get your hand moving that pencil around on the paper, get it busy pulling stuff out of your head. In time you simply won't be able to stop that flow.



Annotating your books makes it easy to find a particular sketch.



A very old page of drawings.



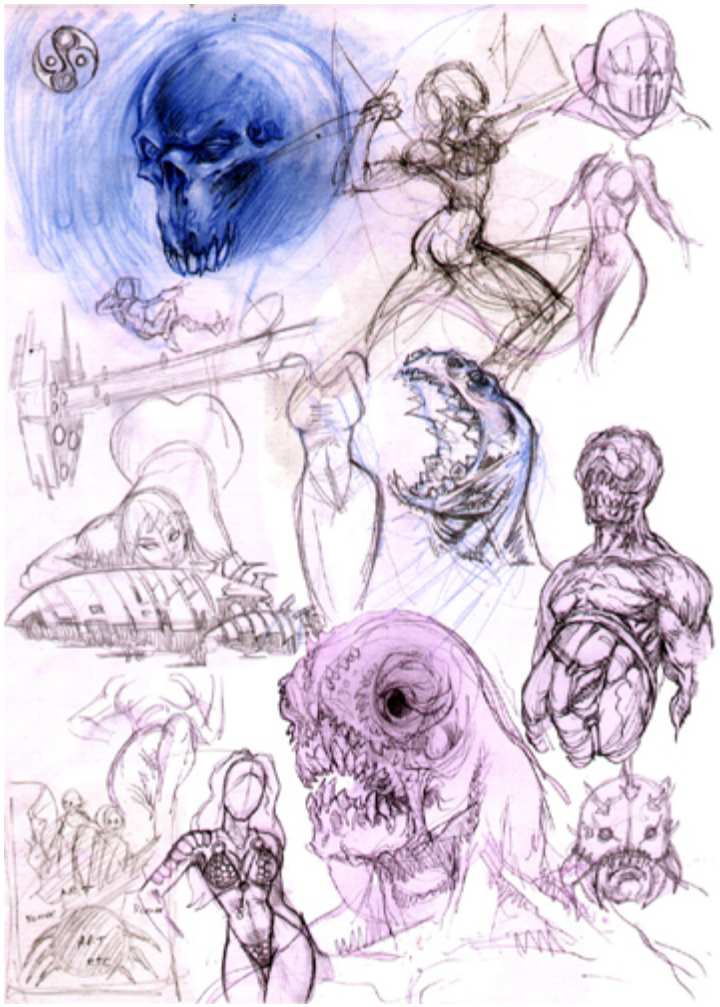
A warm-up session completed on the way to an appearance at a comic convention.



Demon studies.

Throughout this chapter are a range of sketches from my sketchbook collection. It's probably clear that the quality is variable, as some pages are very old, and some are very new, but it's all valid, and all of it has potential to be developed into something interesting. Someone once said that when you first start out as an artist, nothing you produce is any good. That might sound harsh, but after a few decades of practice and experience, hindsight gives it the ring of truth. Even so, I don't wish to be too mean about my past self's work! At the time I was filling those first sketchbooks I thought my stuff was okay. I might not have fully understood what I was doing half the time, but I was enjoying the process of drawing and re-

drawing, and of studying anatomy, perspective, lighting, and all the other good stuff. I was too busy having fun to notice that all the while I was slowly but gradually improving. Also, I never concerned myself with comparing my work with the art I saw in books, as that seemed like a pointless venture. As my grandfather once said to me, “Don’t concern yourself with what the other feller is doing, focus on your own race and before you know it you’ll be out in front.” It was a sporting analogy that wasn’t lost on me, and I continued to doodle and scribble and draw in a kind of ignorant bliss. It was this blind devotion to self-gratification that would eventually help me progress from an enthusiastic amateur to an enthusiastic amateur professional, which, of course, allowed me to get to where I am today.



Another old page of assorted doodles.



This page was among the first I did for a calendar of "Dark Fairies."

Back to the games studio, one of the most gratifying things that happened by the time I left was that I managed to inspire a few of those younger artists to invest their time filling in sketchbooks. One young artist in particular would gleefully present his previous days' page to me each morning, and it was always a joy to behold. It's a legacy I hope to build upon and cannot recommend the experience of "real" drawing enough!

Finished art based on the Dark Fairies sketches.





Basic Drawing Skill

If ever there was a title loaded with weighty expectation, "Basic Drawing Skills" is it. It might sound as if these "basic" skills can be gained with ease, but think again! If a character designer doesn't develop solid drawing skills, there will seem to be something lacking in everything they do. An ability to convincingly portray a range of subjects using pencils or a stylus or even a stick in dirt is an essential skill in the arsenal of any artist, and the only way to develop such a skill is to practice constantly and study diligently. If you aim high with your self-expectations, you'll not disappoint yourself with what you achieve.

Even though you have to put a lot of work in to hone your drawing skills, that doesn't mean you can't have fun while you're doing it. There are a few tricks you can employ to make things flow a little easier, which is what this chapter is all about. There are many great, in-depth books available that tackle the subject of drawing in minute detail, but I don't want to get too bogged down with technical knowledge in this book. Instead I'll keep it fairly simple, with practical tips, and in the following chapter deal with the important subject of anatomy in a little more detail. So, let's have a look at two great ways to advance your technique and create a deeper understanding of character anatomy and design. The first is life drawing, and another is studying the art of others.

Drawing from Life

Life drawing is a practice as old as art itself. It is perhaps the best way to become familiar with the human form, in all the shapes and sizes it comes in. It should be fairly easy to locate a local drawing group that offers the chance to draw from a model, but you don't need to find a life-drawing class to practice. Go out armed with a drawing pad and pencils, find a good spot, and make sketches of people out and about. You'll be surprised at the range of physical variation and expression you'll capture in a short space of time, plus the act of trying to get a drawing down before your person moves away will encourage you to draw faster. Or, you could stay at home and get members of your family or friends to pose for you, or again, sketch them when they're unaware to capture more honest, realistic poses. I enjoy visiting museums, finding the rooms full of marble statues, and then making sketches and drawings based on my favorites. Quite a lot of the ancient Greek and Roman statues are incredibly dynamic, with idealized physiques that retain an element of

physical authenticity, and are fantastic reference, if you have access to some. Also, you can of course use your library of magazines, photos, and movies to work from, but however you choose to practice life drawing, it will benefit your character-drawing skills enormously.



Try to make time for sketching throughout the day if possible. I doodled these while watching TV.



Drawings taken from photographs and museum statues.



Drawings of family and friends.

Follow in their Footsteps

As a young artist I knew little about formal technique, and although I received terrific encouragement from my teachers at school, I didn't feel I'd actually been taught much about how to draw properly with the different media available. This left me with no choice but to make it up as I went, which felt like laying the tracks in front of a moving train at times. Luckily, I had begun collecting books and comics by this point (my "future library"), and as I read them I got into the habit of copying and incorporating some of the character poses I saw there into the drawings I was doing. At first, I'd simply try to emulate an entire body pose, but in time I might take an arm from one place, and attach it to the torso and head from another source, and continue until I had something that looked okay. This process also requires some "stitching together" of parts into a coherent whole, which in turn requires that you improve your knowledge of how anatomy works. Eventually, I found I didn't need to refer to the art of others quite so liberally, and I gradually built up a store of knowledge and tricks that complimented my life drawing. As a lasting legacy, the fantasy nature of the comic art would help me develop a stylized approach to anatomy that has stayed with me ever since.

Sketches and finished art inspired by favorite comic artists.






ABA



This wizard character had to give the impression that he was growing out of the woodland floor, or that the woodland floor was growing out of him. The pencil style was inspired in part by Charles Vess.

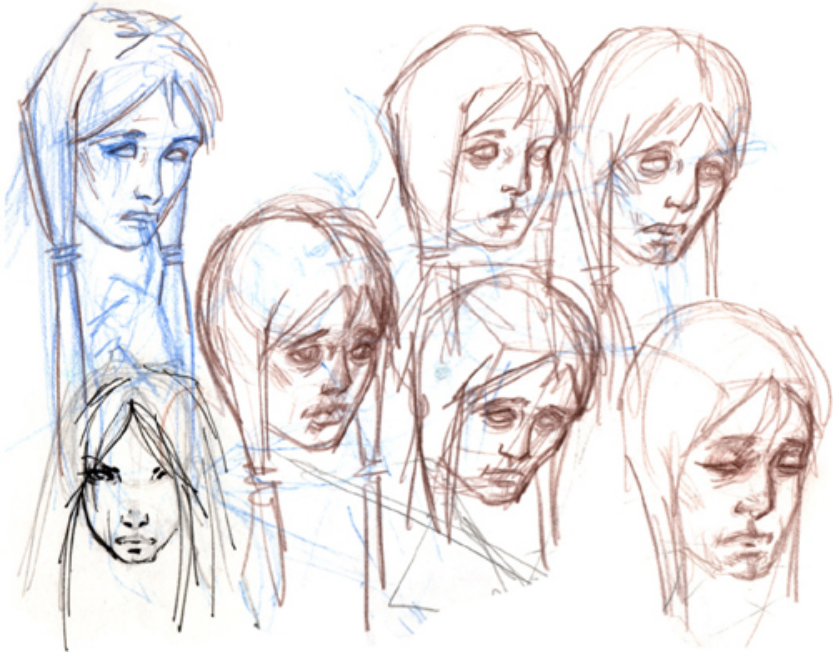
Muscle Memory

Muscle memory is a term used in lots of disciplines to describe how the body becomes used to performing a task, and it is particularly valid with drawing. When I was younger I used to draw all the time—I couldn't help it! It was the most fun I could think of, and I was enthralled by all the things it was possible to pull out of your head and put down on paper. Even though my abilities were limited, it didn't seem to matter, and I remember doing enormous drawings of alien invasions being repelled by cyborgs riding on the backs of eight-

legged Tyrannosaurus rexes that were so big I could cover my entire bedroom wall with a single drawing. However, as I got older, I became aware that the standard of my work was nowhere near as good as the stuff I saw in my books and comics, and this inspired what I suppose was a new stage in my artistic development: I became less concerned with exploring my imagination, focusing instead on all my numerous weak points. As a result, the act of drawing became much less fun, although the challenge of improving my figure drawing and other anatomical details brought with it a different kind of satisfaction. After I'd spent enough time practicing how to draw a particular part of the body, the sheer repetition of the act meant that it became gradually easier to do, until that knowledge seemed locked not just in my head, but also in my hand. That's what muscle memory means. You have to keep working at it though. If you don't, then just like muscles that aren't used very much, your artistic abilities will atrophy, and you'll have to build them back up all over again. This is a lesson I know through sorry experience!



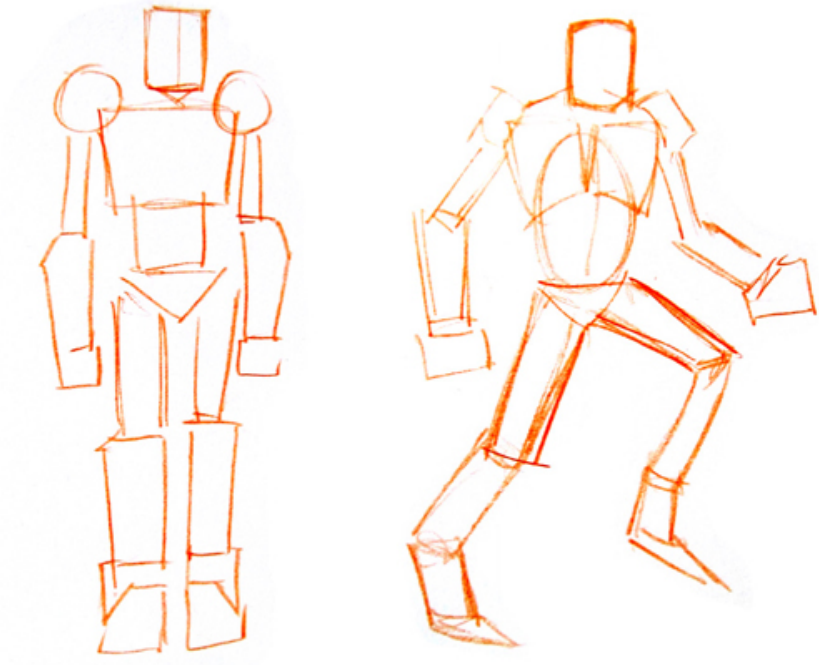
A practice page focusing on the female figure.



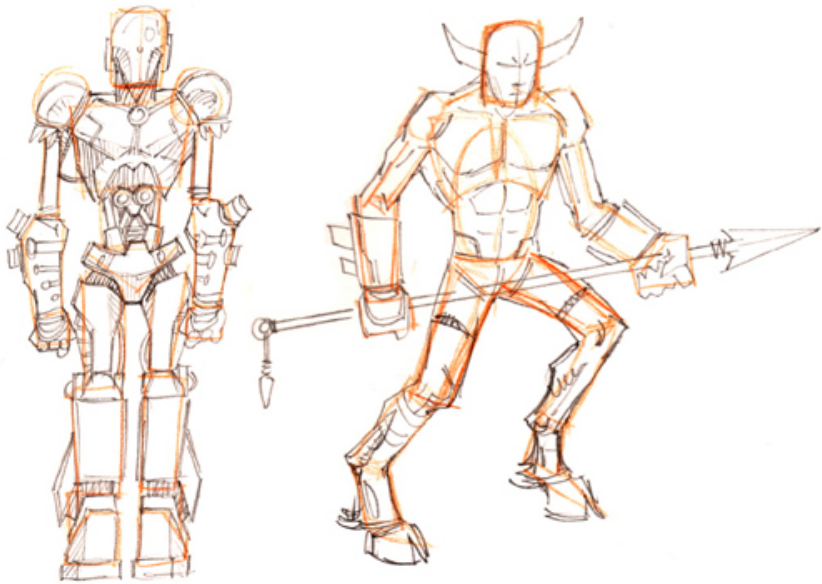
Repetition makes drawing a subject easier, eventually!

Basic Shapes

As you get better at getting anatomical proportions consistent, you can quickly block out your posture concepts and character designs using a simple set of basic shapes such as ovals, rectangles, and triangles, which will save you time and effort. When you have a posture you're happy with, it can then be used as the starting point to develop a finished drawing. This technique is also very useful for building character templates, which is something we'll talk about on here.



Two character poses formed using various shapes.



The poses can then be used as the basis for new drawings.



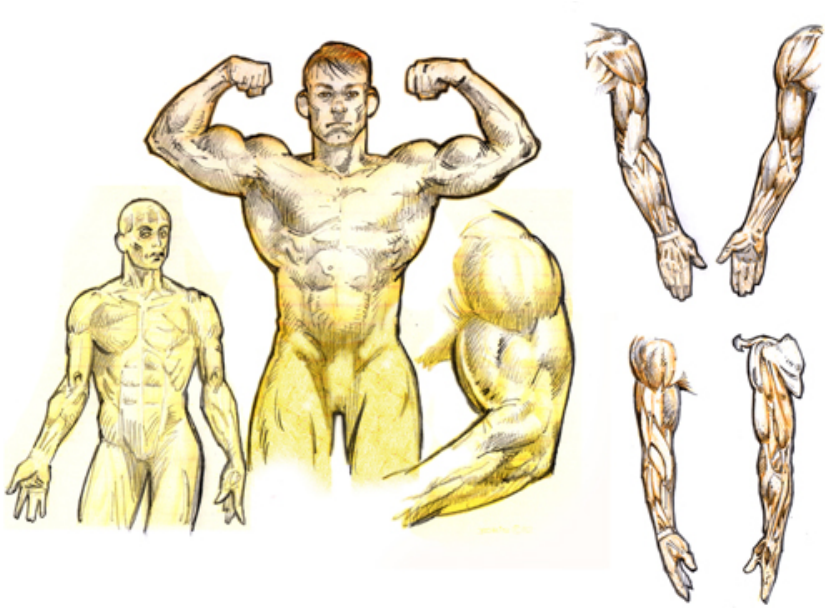
A page of various sketches and pose studies.



While stuck on a train (held up on the approach to a station, interminably!) I thought I'd pass the time by doing a bit of doodling. I had only a notepad and a green biro pen with me, but it was enough! Once again, I decided to use basic shapes—circles, triangles, and rectangles—to block out some ideas for various creatures and characters. Using these shapes allowed me to define form and volumes very quickly and legibly. As yet, I've not developed any of these into finished concepts, but I have no doubt one day I'll find the perfect project for them!

Anatomy in a Nutshell

This chapter provides a very brief overview about anatomy—a subject so huge I could fill this entire book writing about it and still not even scratch the surface! However, the dry study of anatomy in minute detail isn't the goal of this book, and luckily an overly expansive knowledge of anatomy isn't compulsory in order to draw a body reasonably well. The simple tips and pointers over the next few pages will provide knowledge enough to help you produce convincing figure drawing, and should it whet the appetite to learn a little more you'll find there are many fantastic guides and books available, approaching anatomy from all sorts of angles. From scientific, biological studies to comic-art anatomy and dynamic figure drawing, there are books to suit all requirements.

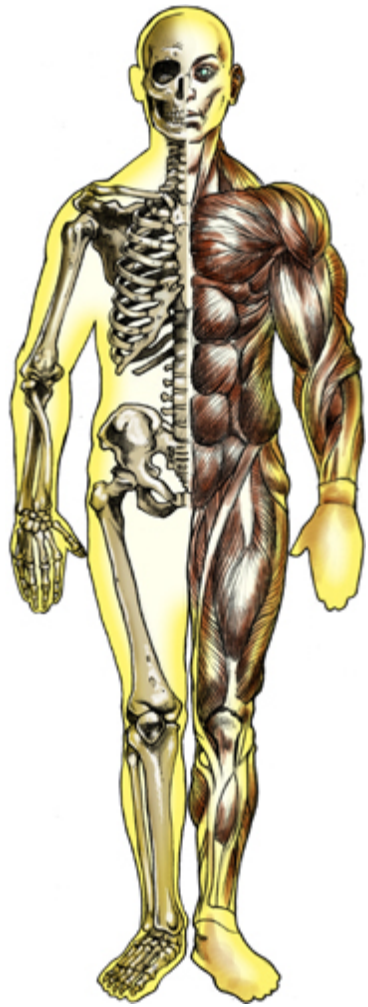


A page of muscle studies.

Much of the contemporary character design produced for games and movies has a strong affiliation with fantasy art, which by definition is partly concerned with the exaggeration or subversion of reality. We'll look at how to break or stretch the proportions on here, but a solid understanding of real-life proportions is essential as a starting point. As you discover the basic rules of how the body fits together and how the bones and muscles relate to one another it will make the task of drawing them much simpler.

The Skeleton & Muscles

This is a drawing of a male skeleton, with the muscles overlaid on one side. Study the sizes of the bones in relation to one another, and then notice how the muscles fit over and attach to them. When parts of the skeleton are moved, this has an effect on the shape and form of the muscles relating to that area. This can be seen in the drawing of the arm muscles as the arm bends at the elbow; the bicep contracts and bulges as it pulls the lower arm up, but the tricep located on the back of the arm is stretched and so appears flatter. This is essentially how all the muscles of the body work, they contract or stretch, and as each muscle deforms one way, there is another muscle deforming in opposition to maintain balance and physical stability. It's an amazing system, well worth taking lots of time to study.



The body split into a skeletal half and a muscular half.

To revisit a theme covered on (see here)—following in the footsteps of artists who inspire you is a good way to get yourself drawing. It's how I started out after all! However, sooner or later you will realize that what you're actually doing is copying their interpretation of how anatomy works without, perhaps, fully understanding it yourself. This is when it's good to do your own research, essentially building the bones of a deeper knowledge that will improve your work dramatically. I'm not dismissing the notion of learning from your heroes either, as I still do that today, but if you improve your own knowledge, you'll also be able to glean a little more about the process of how those other artists work.

I've also supplied drawings of the leg and back muscles as a purely visual point of reference, so at a glance you can see the different muscle groups, where on the body they attach, and what their relative sizes are. When skin is layered over the top, it will stretch and contort, fold and ripple depending how the muscles beneath are being flexed, stretched, or contracted as the bones move. Bones, muscles, and skin are intrinsically connected, and good figure drawing depends on a solid understanding of how they interact with one another.



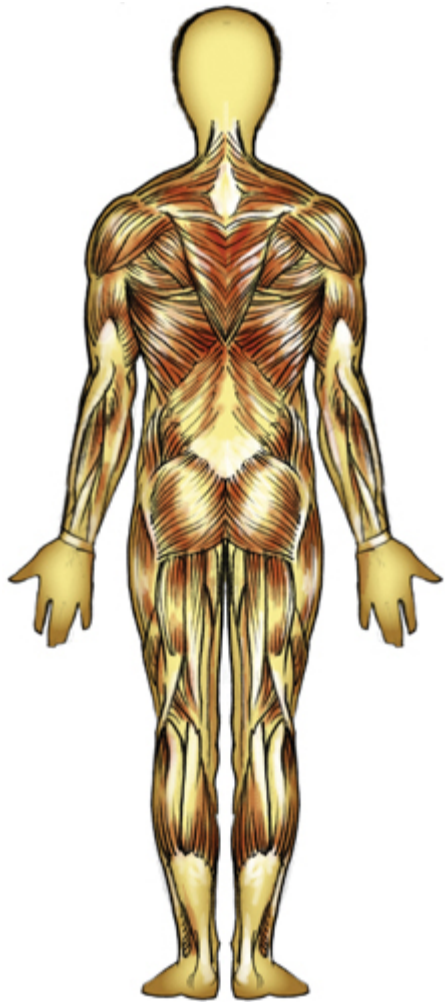
The bicep muscle in the upper arm deforms when flexed, while the opposing tricep is stretched taut.



A study of the back, dynamically posed.



The muscles of the leg, side-on.



The muscles of the back, including arms and legs.

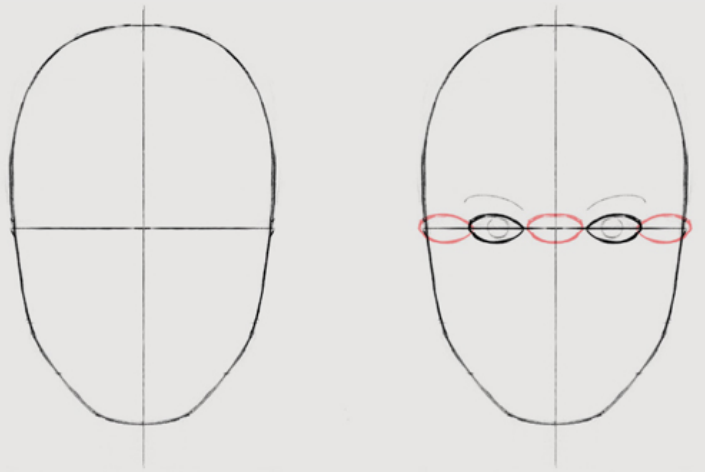
The Head & Face

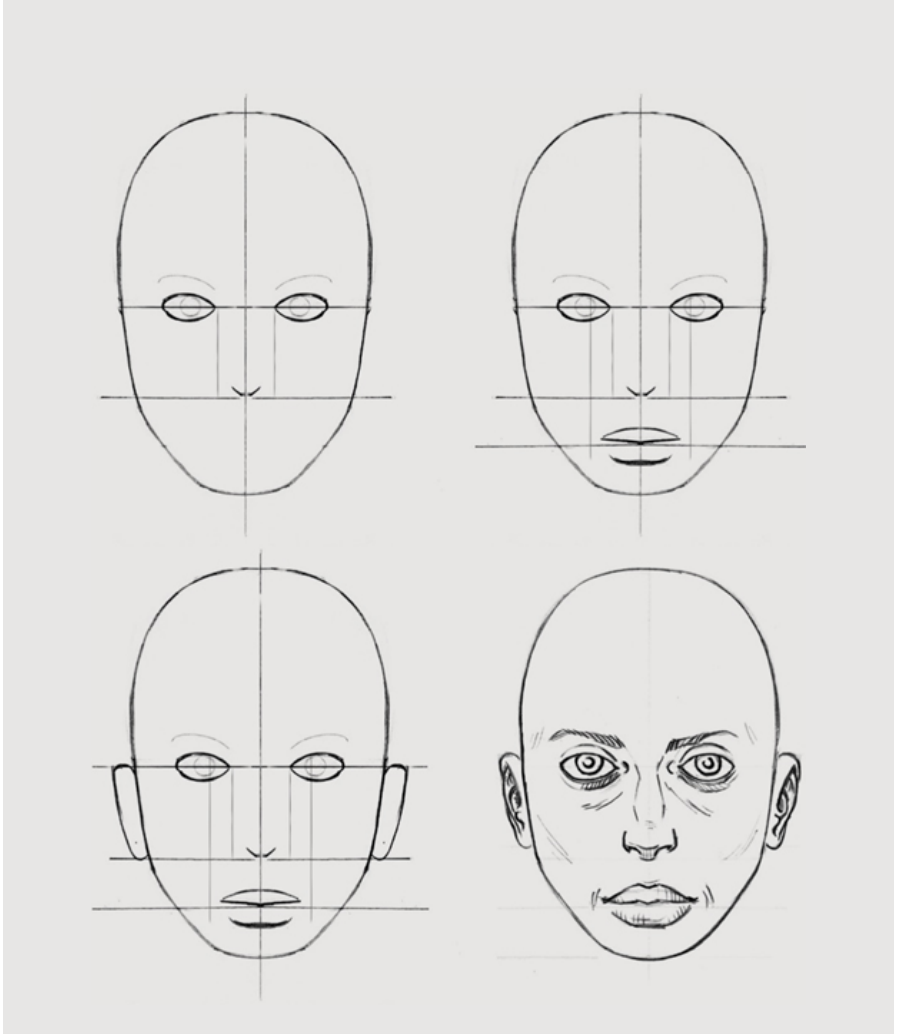
The head is a complex anatomical region that can be used to express and define everything you need to know about the personality of a character, and as such deserves to be focused on in isolation from the rest of the body. It is home to the familiar array of sensory organs that collectively make up the face, a region not only finely balanced and arranged, but also capable of great expression through movement and plasticity. It can take years to master this deceptively straightforward-looking set of features, but the following guide is a good place to start.

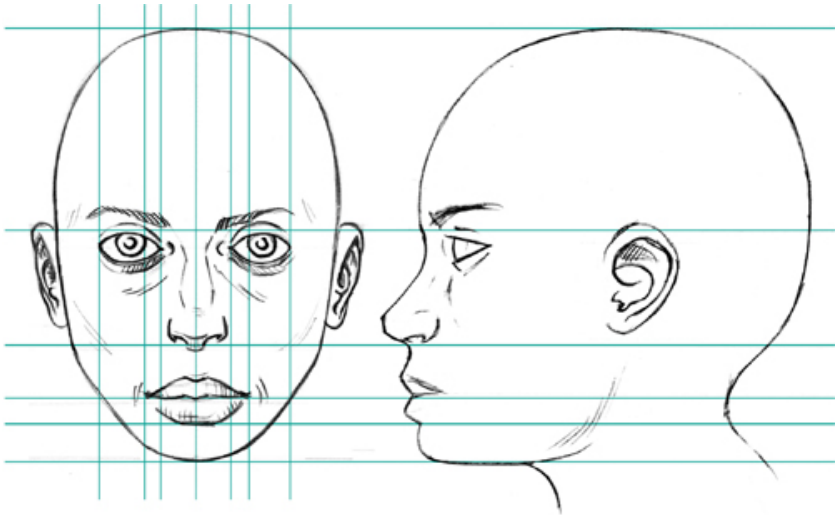
Begin with an oval when drawing a head, which is simple enough, but

make sure the oval is wider at the top than the bottom. Precisely where the features are drawn can be trickier than it seems for those with little experience, but luckily there is a simple set of rules to help get it all perfect! First, draw a vertical guideline right down the middle of the oval, and another line horizontally through the center. This horizontal is where the eyes are positioned, and the length of it is approximately equal to five eyes; this means that when you draw the eyes in they should have a gap between them equal to the width of a single eye, and the same gap on either side. Next, draw another guideline halfway between the eye line and the base of the oval (the chin). This line is where the bottom of the nose is located. The maximum width of the nose (the nostrils) is roughly the same as the gap between the eyes. Next, draw another line halfway between the nose line and the chin, and this is where the mouth is drawn. The mouth line "at rest" is as long as the space between the irises of each eye when looking directly ahead. The ears are no less simple to place: the bottoms of the ears are roughly level with the bottom of the nose, and the tops of the ears are at eye level, or thereabouts. It really is quite stunningly beautiful the way the features are all balanced in this way, and using these guides you just can't go wrong. So that's a very basic guide to drawing the face. I can't stress enough the importance of studying this subject further, as there are lots of other little aspects to take into account. The more you learn and the more you'll practice, the easier it will become.

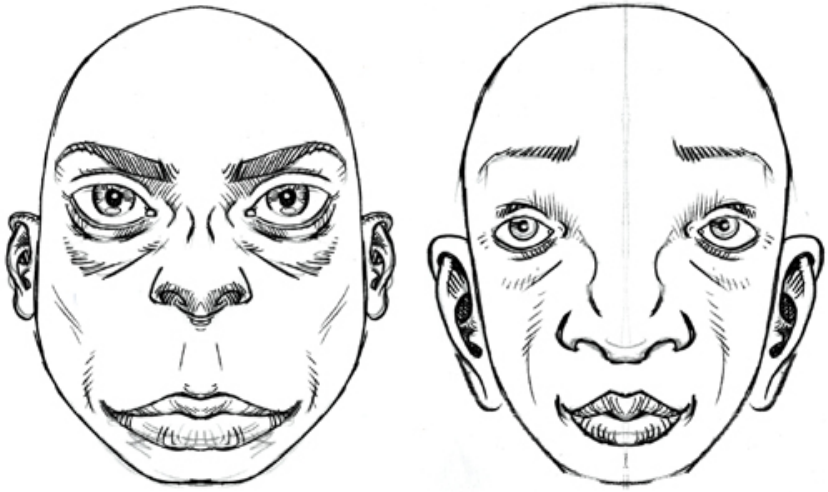
The stages of drawing a head and face.







The head from the front, and side-on.



Here are two faces that do not conform to the guidelines. The first face features a bottom-heavy shape, with huge eyes higher up than they should be, and an enlarged mouth moved nearer to the chin. The second face retains a standard head shape, but the eyes are altered to look smaller and wider. With a wide nose, huge ears, and narrow mouth, this face looks different than the first, but no less odd. You would notice a person who looked like either of these examples within a crowd instantly, because the feature sets are so incorrect.

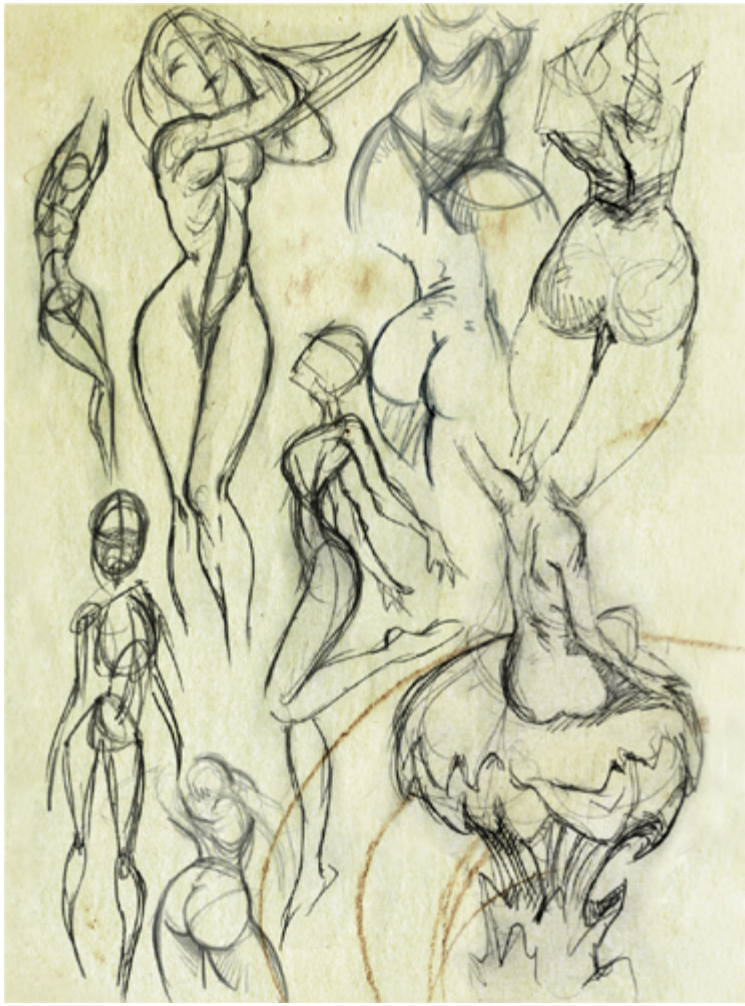
Adult Female

For many years I avoided drawing women almost entirely. The reason

was simply because I wasn't very good at it, and for some reason a poorly drawn female makes your inadequacies as an artist much more obvious than a badly drawn male! So, I stuck to drawing monsters and dragons for the most part, which worked out just fine during my first year as a character designer. Then a brief came in that required me to design a female warrior, and I realized I could avoid it no longer. Keen not to repeat my earlier failed attempts, I gathered as much artistic reference as I could and began to practice. One artist in particular I took inspiration from was Bret Blevins. I'd read an article he'd written for *Draw* magazine in 2001 entitled, "How to Draw Lovely Women," and although he was more concerned with drawing idealized, almost cartoon versions of women, he gave a lot of useful advice that proved invaluable in my studies. He wrote, "The foundation of any graceful figure drawing is rhythm." In a nutshell, this is the best thing to bear in mind when drawing a female. Fluidity of form suggests grace in motion—an intrinsically feminine attribute. Of course, there are also those distinctive differences between male and female bodies with which you must familiarize yourself. First, the female body shape is generally smaller than that of a man, but with wider hips, which push the upper legs out, helping to create the figure-8 shape. Also, a feminine figure has fewer sharp edges; instead the lines that describe limbs, the neck, hips, and torso flow in a series of smooth "S" shapes. This creates inherent movement even within a static drawing, which adds to their distinctiveness. The face, too, should be treated distinctively: Avoid adding too many lines, simplify the detail, and soften the cheekbones and profile. The lips should be fuller, the chin narrower and the eyes slightly larger proportionately than the male. As with all anatomical subjects, there is so much more to learn if you want to dig a little deeper, but these brief guidelines should help solve the kinds of problems I myself struggled with as a young artist.



My first proper attempt to draw the female body, working accurately from photographic reference.



A study page of female poses.

So, you should now have all the information you need to boost your confidence while tackling this most fundamental of all character-drawing issues. Remember to practice drawing people not only from the front, but side-on and from the back, and work on the proportions until it becomes second nature. I've been studying anatomy for years, and I still fill sketchbook pages with test sketches of arms, legs, torsos, faces, and full figures to keep from getting rusty. Remember, hard practice will result in easier drawing.



In this drawing produced for a calendar, the soft lines of the form along with the small waist and broad hips represent a classic portrayal of the female figure.

Character Design Templates

While it is important that a character designer develops and hones a solid ability to draw, with a particular focus on anatomy and faces, this doesn't mean you shouldn't take advantage of a few tricks to make things a little easier and speed things up. When I began working as a concept artist, I drew every single character design from scratch, and every variation I wanted to explore was another drawing on a new piece of paper. This is no different to how many other artists work, but it does take time to get a lot of ideas properly represented. This means that if a job has a tight deadline, the number of ideas you can present is strictly limited.



A selection of full-body templates, ready to print out and be worked over.



Another set of templates. Note the variety of body shapes, ranging from realistic to cartoonish and stylized.

By this point I had been using Photoshop for ten years during my time as a video game artist, and I soon began to wonder if I could use digital methods to speed up my process, and in doing so increase my output. This led me to discover for myself a technique I've since learned many concept designers use. I set about developing a series of character templates. These consisted of a set of basic pencil drawings of infant and adult male and female physiques, full figure and waist-up, from front, back, and side. I then

scanned these into Photoshop, and used the software to turn them a light blue color. (I would sometimes use other shades too, such as yellow, orange, or green.) Then I simply printed numerous copies of these light-colored templates onto drawing paper, which gave me a basic body shape over which I could then produce as many variations of a character or costume as I wanted within a much reduced time period. I produced numerous other drawings featuring more dramatic perspective or action poses so I could expand my choices, and it revolutionized the way I would approach any concept art task. I used the same process to produce a range of faces: Males, females, adults, and children, along with various alien and monster templates as and when a job required them. I now have a large library of templates I can use to get a character concept job started quickly and efficiently, and I still like to produce new ones if I have time.
I haven't completely stopped producing concept drawings from scratch (I still enjoy drawing too much to abandon doing it the hard way entirely), but using templates allows me to fully realize a range of ideas and variations of ideas with improved efficiency.



This template above was sketched from a friend as she used her mobile phone. I simplified the drawing and elaborated the proportions to make it look more stylized (i.e., more suitable for comic work). I then used Photoshop to change it to blue, and printed six copies onto good art board.



From those six copies, I produced a random assortment of different characters—some from existing sketches, and others I made up on the spot. These drawings are loose and quite rough around the edges, but all six took about forty minutes to complete—a task which would have taken much longer if I'd had to start each drawing from scratch. Of course, the more experienced you get at figure drawing, the faster you will become, but when you're starting out, this technique is invaluable at helping to dramatically improve your output.

Using Templates

What follows is an example of how I might use such templates to answer a brief. I'll keep coming back to this project throughout the second section of the book to show how the concepts are developed, but right now let's have a look at the brief, which was inspired by a sketchbook drawing.

Brief: Design a tribe of "ant people." They must be humanoid and feature both male and female members. There is a hierarchy within the tribe, with each divisional band having its own distinctive, identifying physical attributes.

So, now I've set myself a design problem, I must decide how to approach it. First, I need to define what the hierarchies are within this humanoid-insect society. Let's imagine a drone caste at the bottom: These creatures perform all sorts of menial jobs, such as food foraging, location scouting, and building. Next would be a soldier caste, whose job is to protect the drones and their superiors. Then there would be a commander set, formed of more intelligent individuals. This caste is responsible for directing the drones and soldiers. Finally, of course, there would have to be a queen of some kind.

With these parameters in place, I now know what I'll need to get started, so I print out enough human male and female templates to

produce a number of varieties of each caste.

Drones

For this first set of concepts, I'll show every stage of how to create four variants. Only two symmetrical templates are needed, as I'll explain shortly. The drones would differ slightly depending on what job they might do, but I decided to keep them fairly humanoid in aspect, with a range of slightly different body structures and heads. Because the templates I used are symmetrical and front-facing, there is no need to draw both sides of each design; I need only draw one side, then copy and flip it later in Photoshop. Therefore I can draw four different ant body halves using only the two templates. A simple and time-saving trick, which I must admit took me a few years to stumble upon. Returning to the ant designs, I reasoned that some of those sent out to forage might benefit from having numerous limbs, whereas some might have different arms for digging and other specialized activities. Builders would be heavily muscled. I decided to break up some of the torsos into quite well-defined sections, with a few socketed joints for limbs. You'll notice there wasn't room enough for the giant builder's arm, so I drew that in a different area of the paper. By the time I had finished I had a couple of very peculiar-looking creatures indeed, but after scanning into Photoshop this was easily remedied.



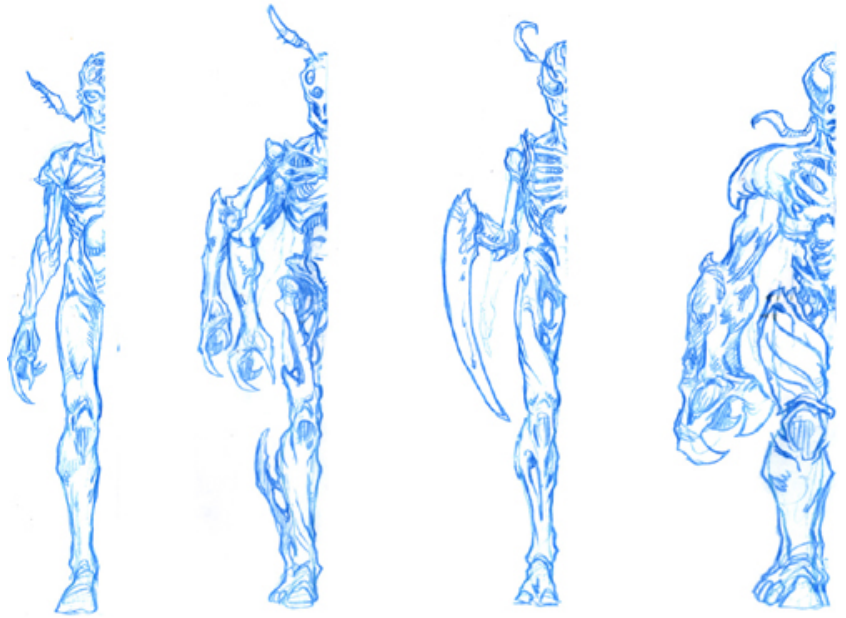
A sketch of an ant woman from my sketchbook which inspired this case study.

I carefully split each drawing down the center, cut and copied the right-hand halves into a new layer. Next I attached the huge arm to the builder-ant torso, using the Photoshop transformation tools to thicken the leg and shoulder. (I've flipped the pasted half-bodies and arranged them side by side to better illustrate the process.) I then had four halves, which needed to be made whole. One by one I copied each design, flipped it, then positioned it snugly with the original, aligned to create a whole body. Although each design is symmetrical, it doesn't matter because they efficiently offer a range of ideas from a very quick turnaround. Photoshop is also useful for

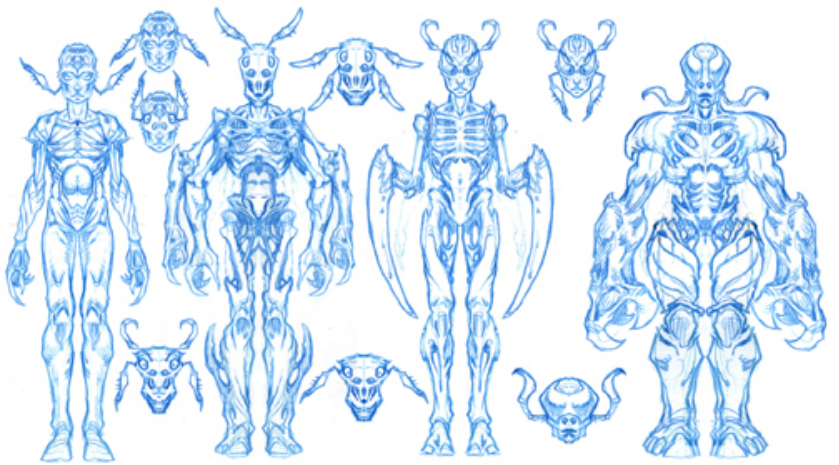
quickly and easily producing alternative head designs, which I've created by mixing different parts together.



This is the how the concept drawing looks in unaltered form.



Photoshop is then used to split each body into halves.



The final design sheet, with four completed ant people and a variety of heads.

Soldiers

For the soldiers, I begin sketching over a pair of unsymmetrical templates. Soldiers might feature an impressive range of different biological weaponry, from claws, talons, and pincer-jaws to stabbing extrusions, mantis-like limb-scythes, and even organs capable of shooting out venom or formic acid. Typically they'd be much more

developed than their drone counterparts, moving away from a merely humanoid physicality toward an explicitly insect-like resemblance. Some might have multiple sets of limbs, or tendrils tipped with vicious stings, but all would have well-developed eyes, sometimes more than two. As I worked on the drawings, I began to incorporate lots of ideas into each one. The first received six arms, armed with various claws and spikes, plus a long tongue or tentacle, ending with a prehensile, barbed grasping tip. This concept also had legs jointed more like a quadruped, making it the least humanoid of my drawings so far.

The second soldier concept reverted to a humanoid aspect once again, but featured a radically insect-like head, with large stabbing mandibles and huge, mismatched eyes. The asymmetry continues with the arms, one being equipped with slashing spikes, while the other has morphed into an organic formic acid “gun.” Although produced using a different technique compared to the drones, elements from either of these designs could easily be incorporated into new versions.



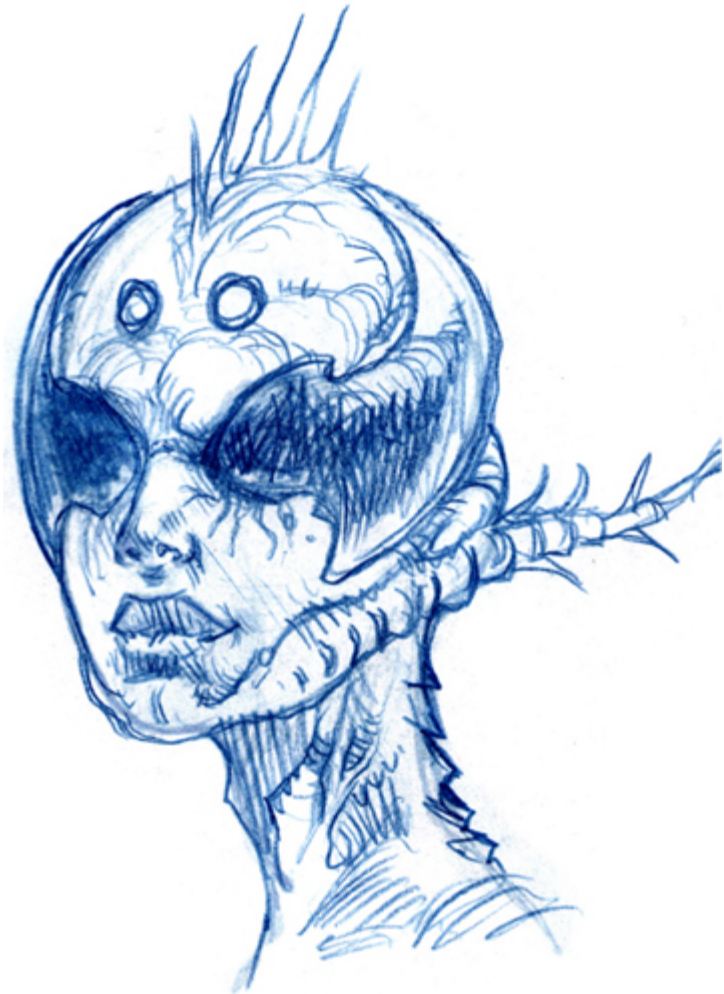
This soldier has six arms, and legs jointed like an animal.

Soldier Heads

The full-body concepts were quite bestial, but I wanted to see what a more humanoid concept might look like. I took three copies of a female human head template, and began to sketch over the top, making sure to keep at least parts of the designs recognizably human.



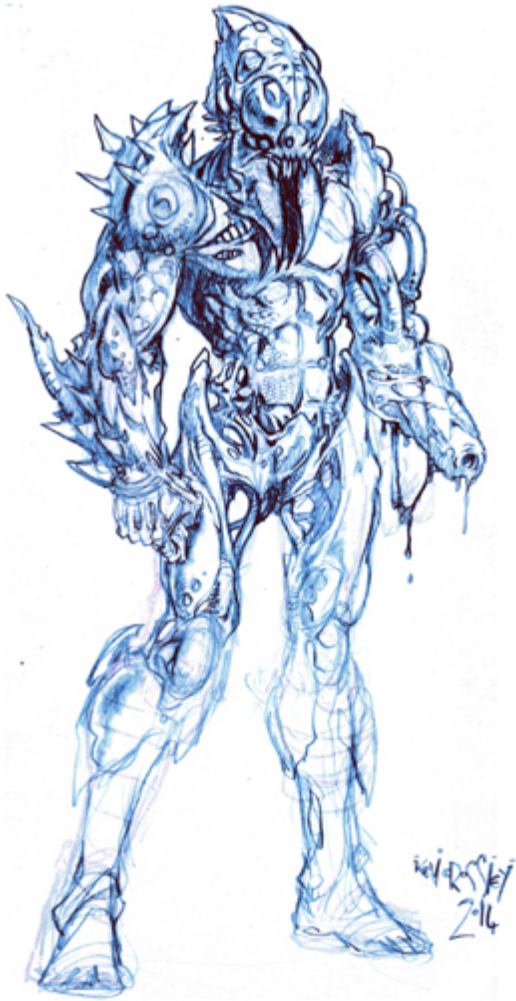
This concept retains human(ish) eyes and nose, but the ears have fallen quite low and the mouth is little more than a gaping hole ringed with fangs. The lower chin is fused into the protruding tongue-like organ which is tipped with probing tentacles.



My second idea kept the nose and mouth human, but the eyes were completely lost beneath huge, insect-like ocular areas which swept back over the head. A few spines and other odd details completed the image.



For this version, I again kept the upper head largely human, even more so than the first one, but for the mouth I opted for something entirely monstrous. I split the entire lower face and jaw into six fleshy flanges, each tipped with spine-like teeth. The idea being that the creature could open its mouth wide enough to bite the entire face off an enemy. Nice!



This creature is well armored, and has an acid squirter in one arm.

Commanders

For the commander caste, I began thinking that some of them might be evolved soldiers, and using another pose template I quickly produced a very aggressive, bestial creature, with a much-reduced abdomen and massive arms and shoulders. I thought perhaps it might have been injured in combat during its time as a soldier, hence the gaping torso! However, it survived, and was probably mentally developed enough to become a commander.

I then had another idea: What if some of the commanders were some kind of “proto-queen”? These would be female, obviously—slim and perhaps more insect-like in appearance. Using the same

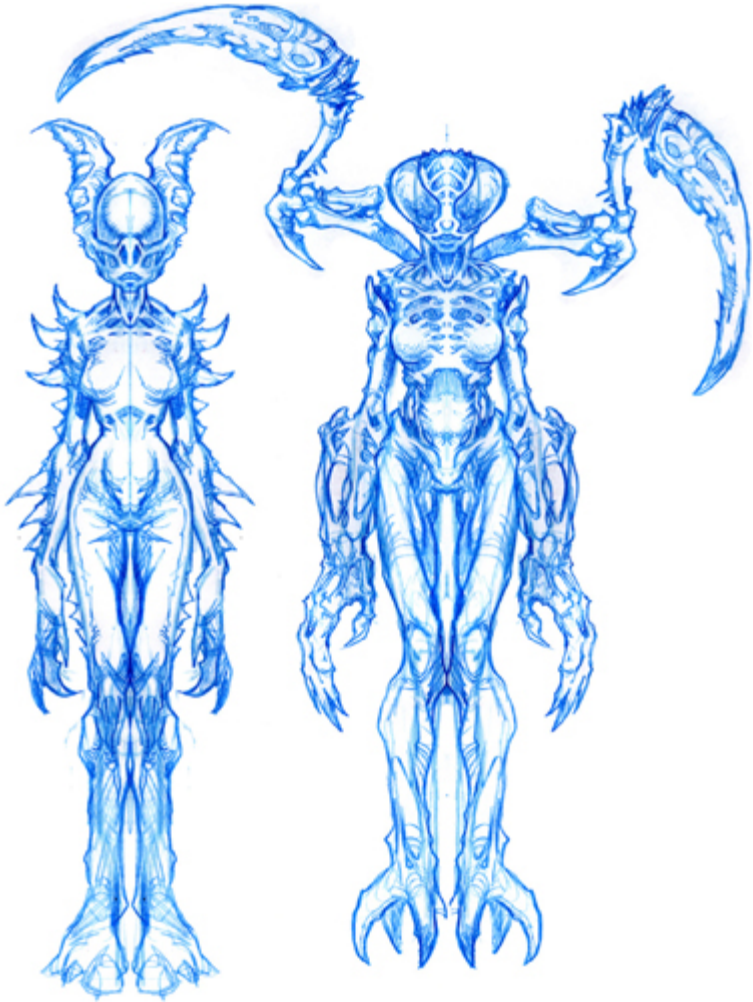
technique as with the drones, I began to develop a pair of concepts over a female front-facing template. I gave the first one a spiked silhouette, with a dome-like single “eye” framed either side by crest-like horns. The second drawing was more exo-skeletal, with enlarged forearms and talon-like toes. I also added jointed appendages tipped with scythes to the back—less offensive and more an indicator of her elevated position. When completed, each of these designs would inspire the direction I would take with the queen.

Commander Heads

As with the Soldier concepts, I decided to explore a few more head ideas for the commander creature. This time, I printed a sheet of copies of the head from my commander drawing, so I could produce a range of new concepts which retained elements of my full-body concept.



This monstrous commander was once a soldier.



These designs feature “queen-like” attributes.



I tried again with the idea of a cranial crest, but this time I had it rising up and flaring out to each side. The result was more legible than my previous attempt.



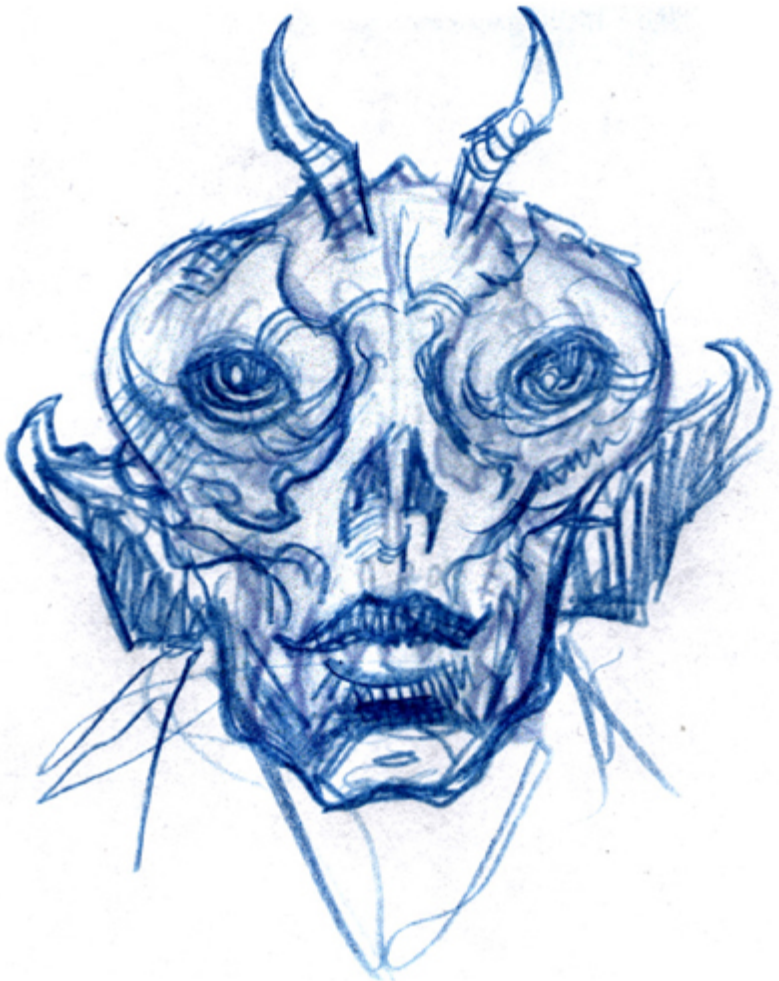
This drawing was a quick sketch to see what an enlarged cranial crest might look like, although it actually resembles a spike when viewed from the front like this. The mouth is reduced to a pair of hinged palps, tipped with teeth.



This guy retains the large eyes and skull-like nasal orifice, but in place of a mouth it has a strange, forked beard, covered in spines. Or teeth.



This idea was simply a bit of odd fun. It occurred to me that the eyes were sort of shaped like human skulls, so I gave each eye area a skull-like aspect, just to see how it would look! The mouth is reduced to a pair of hinged palps, tipped with teeth.



This last head looks simply bizarre, but I've included it here to illustrate just how varied the results can be during the concept process. I reverted the bestial insect aspect of the original back to a human-ish concept, with human lips and eyes sunken into the insect eye mass. Obviously there is something not quite right with this concept, but with a bit of work on the proportions and individual elements it could possibly be turned into something quite interesting. Feel free to have a go yourself—and send me the results!

The Queen

I began work on a pair of queen ideas directly after finishing the previous commander concepts and using exactly the same method. Using a copy of the same template, I produced a more statuesque

body shape for my first concept, drawing heavily from the spikey commander. Some insect matriarchs can be much more elaborate than the ordinary workers, just as human royalty are when bedecked in all their finery, so I set about creating a memorable silhouette for the ant queen. This was helped in large part by the addition of an extended crest to the head. My first concept adorned this crest with curved horns, and I added multiple pairs of eyes up each side. The upper torso gained a thick, armored growth extending beyond the shoulders, and the rest of the body was covered in tough, overlapping plates. I gave the second concept a slightly more human face with much smaller eyes, but I kept the crest idea, which this time began to resemble a spiked crown. I kept the shoulders narrow, but bulked them up with armored plates. I kept the rest of the body fairly plain, with textured skin or hide hinting at the segmented nature of many of her subjects, and I simply used thinner versions of the same legs the first queen concept had.

To complete the regal aspect, I drew a few extra crests and adornments, “borrowed” a piece from one of my commander concepts, and created four variant ideas, each with a different attachment addition to the back. The result was a selection of stately looking creatures, clearly existing at the top of their species ladder!

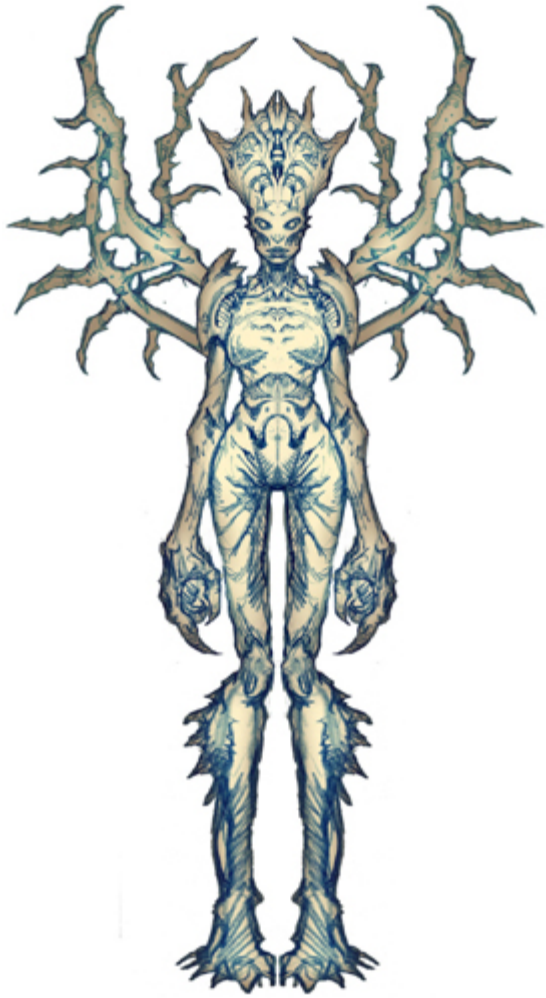
Using templates certainly helps speed up my ability to explore ideas and provides me with a great selection to work from should I want to take the design process further, which is something we’ll explore in section 2.



The completed queen concept designs.



Variant 1, with huge wing-like extrusions.



Variant 2, with barbed horns.



Variant 3, with multiple scythe limbs.



Variant 4, featuring an enormous and regal crest.

The Job, the Client, & the Brief

Now, this chapter might well be the one that makes you feel like you're back in the classroom being nagged, when all you want to be doing is running free across paper plains with rampant pencils. Well, what follows isn't quite as bad as all that, and the subjects covered are quite important and well worth taking a little time to consider. I've included some sumptuous art to sweeten the pill a little, too.

Self-organization

As a professional artist, it can sometimes feel as if you are being pulled in two directions: On one hand, your artistic temperament demands the freedom to be expressed openly, without having to answer to anything other than your own creative impulse; at the same time, however, you must be mindful of what the client or publisher asks for as described in the brief, which should be your guiding point throughout the job. This is where self-organization is important. Now, you might be thinking this is a rather obvious concept, and it seemed so to me too when I was a young art student. However, my tutor always encouraged me and my fellow classmates to really look at how we organized our working week in minute detail. It wasn't something I'd put too much thought into, I must admit, but once I did it became clear that my self-organization was disastrous! It became something of a subject in its own right to me, so I then developed a plan, splitting it up into four areas: Setting Up Systems, Art versus Design, Time Management, and Defining Tasks.



A portrait study of an unpleasant character called Styx from a friend's story.



A pencil sketch for a masked vigilante with homemade wings.



An early character design try-out by Paul Green for the "Sunset" concept shown on **here**.

Setting up Systems

This term sounds a little dated to me now, but it simply involves working out the logistical practicalities of how you can carry out your work. First, think about the physical space or places where you work: Do you have a dedicated studio space, a separate room in your house, or do you work on the sofa in front of the TV? Whatever your circumstances, ensure you are comfortable and have everything on hand to ensure you can carry out your tasks. Next, what equipment do you need? A traditional artist will need much of the equipment already described in the Equipment chapter, but the space required

to store it needs to be taken into account. If you work predominantly digitally, you can probably get by with much less space. However, no matter which situation applies to you, you must still ensure you have sufficient light to work by. A location to work during daylight hours should be well lit, ideally with a large window and white or at least light-colored walls, and at night never work by the light of a computer screen alone, as this will play all sorts of merry hell with your eyes.



An alternate version of Runner.



A concept sketch I scanned and colored in Photoshop.



Very rough doodles from a sketchbook.



Tighter pencil concepts for demons.

Art versus Design

This subject involves how you define yourself in a particular role. If a client asks you to paint for them an exciting fantasy image, then you obviously adopt the role of "artist." Imagination and creative flair can be allowed to flourish in extravagance, with a certain degree of idiosyncratic embellishment. However, if a client needs a spacecraft pilot designed for their future-war video game, then you become a "designer." Although imagination and creativity are still important, the way you use them becomes defined and by necessity constrained to some degree by the specifics of the brief. When I was a student, a visiting lecturer gave an illuminating talk about how the professional designer should conduct themselves, and from it I took this

memorable quote: “Skating about on the surface of irrelevant brilliance is no way to spend the client’s money.”
It took me a while to realize what he meant by that, but as I became more confident in my roles as a professional artist and designer during the development of my career, it had clear resonance. As an artist, you are employed to be yourself; as a designer you are employed to solve someone else’s problems. Remember that and you can’t go far wrong.

Time Management

This subject is self-explanatory, but it can become one of the most difficult aspects to keep control over, especially if unforeseen issues arise (as they often do). When you begin a job, identify the time you have available (usually this is defined by the client), set yourself targets, sometimes called milestones, and make sure you meet them. To account for those unforeseen problems that might arise, build some gaps into your schedule, so if something does go wrong you have some time available to address it. Also, try to minimize time wasting! That is perhaps the most obvious tip I could offer, but I cannot stress it enough. Set yourself a number of hours per day in which you work, and use them well. Sometimes you’ll find a deadline is particularly demanding, and suddenly your evenings (and sometimes nights!) have to be turned over to work too. During crunch periods like these, time becomes the most precious commodity, and you may well begin to regret the mornings you bunked off to play that brand-new video game, or the parties you attended with rather too much enthusiasm.

Defining Tasks

This subject involves identifying what is needed to answer a brief. As previously stated, the job of the designer is to solve problems. When you receive a brief, you must identify any and all problems presented by it, and ensure you and the client fully understand them. Only then can you decide upon the most likely course of action that might lead to solutions. The best way to attack a design problem is to rationally and methodically break it down into smaller, manageable targets, and these can then be attached to the milestones you build into your work schedule. (As an aside—I had to do exactly the same thing when I was designing the chapter layout and breakdowns for this book. Notice how this chapter is broken up into smaller sections, each one concerned with a specific subject? The same principle is true for almost every job you’ll ever take on.) While tackling these

targets, take inspiration, ideas, and instruction from as wide a range of sources as possible, but boil it all down to fit within the parameters of the design problem that you're addressing. Finally, when you are ready to present your solutions, or finished designs, ensure you present them clearly and concisely, making sure your client properly understands your reasoning and how you arrived at your conclusions.

Presentations

I'd like to include a final chapter about the meetings where you show and explain your ideas to the client. These will happen at every stage of the job, so all discussions will need to be well documented, and any ideas explored in depth, before becoming more focused and settled to the satisfaction of both parties. The designer and client must always find common ground in order for their working relationship to flourish, and above all, at every stage the designer must ensure the client is confident they know what they are doing. So that's a breakdown of my working methodology, a system I developed while I was a student at art school and have carried with me ever since. Remember also that, although how you approach a project is defined by a number of issues, always begin by ensuring you fully understand the brief. You can then refer back to it at any stage of the job should you begin to lose your way. This will ensure you don't stray too far from the remit of the job, and will help make sure your interpretation of it remains true and focused. In turn the successful realization of the client's project will be easier to achieve.



A design for Zombie Elvis, finished with lots of elaborate border doodles.



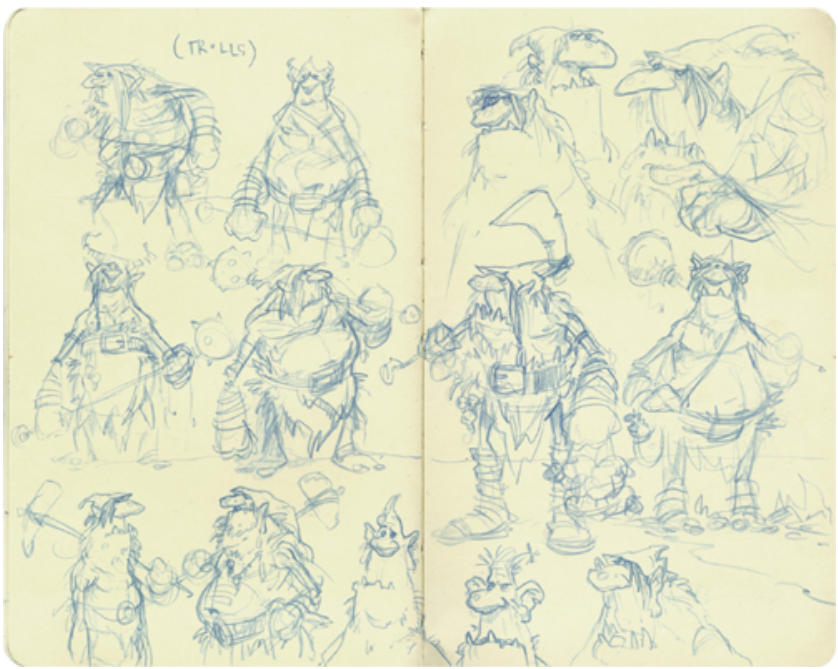
A selection of boldy colored monster concepts.

2
THE PROCESS



Ideas, Thumbnails & Sketches

In this chapter, sketchbooks once again prove their worth. I'll explain how I use my "Frankenstein" method to recycle old ideas and turn them into something new, plus I'll show you how a seemingly throwaway doodle in an old sketchpad can end up being really useful for projects years later. Those loose, often quite scruffy sketches and ideas are the bedrock that sits under every project, and although most of them may never see the light of day, they can be just what you need to get a project started. We'll kick things off with Jonny Duddle as he explains his working methods for a brief to design a troll.



A page of troll sketches by Jonny Duddle.

"Troll" By Jonny Duddle

"My first reaction when I get a brief is to start doodling in my sketchbook. My sketchbook drawings may never reach an art director, but they get my creative juices flowing and ideas become more defined. From these thumbnails I work on some larger, more detailed sketches. These are still a long way from finished designs but will be a starting point for further discussion with the client." With these new drawings, Jonny had a good selection from which to choose. He continues, "So, having picked a sketch I'd like to work

up, I start to think about how I can refine a design. The first drawing is just a head and shoulders, because I want to get the head sorted out first. As a fantasy creature, trolls have been depicted in a huge variety of ways, and I'm trying to form my interpretation of a classic creature of folklore. I don't have a clear picture in my head at this point, but once I have one drawing I can decide if I'm going in the right direction."

Jonny then produced a second drawing, taking elements from the first and various ideas from his thumbnails. Although the troll's physique was looking good, Jonny thought the head was pretty dull and needed more interesting features. He explains his next step: "I start on another drawing, exaggerating the troll's nose and dropping his mouth farther down his face, while giving him much larger teeth. The body of the second drawing is developed further, and the long hair, leather cap, and dangling ears are retained. The drawings so far are in graphite or blue Col-Erase pencil, but I'd like to add some impact for presentation to the client. So I scan the third drawing into Photoshop and place it on a textured background, (which is just a scan of the back of my marker pad!). I desaturate to make the drawing grayscale, adjust the levels to get some contrast in the line-work, and add some subtle shadows and highlights. This can then be printed (or emailed) and given to the art director as my reaction to the brief, and a first step in the troll design."



Jonny's first troll drawing based on his sketch pages.



A second drawing merges elements from the first with other ideas.



Jonny's third troll is much more developed.



The drawing is scanned into Photoshop where texture is added.

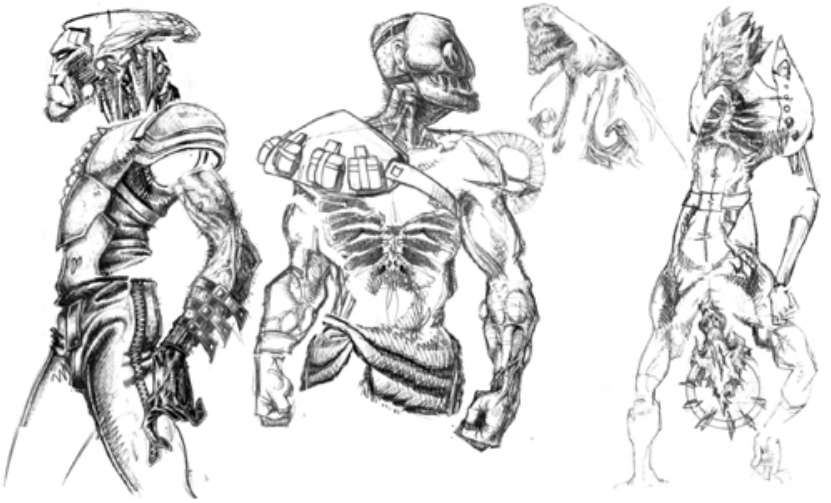
The Frankenstein Method

I sometimes use what I call "The Frankenstein Method" when I'm producing character designs. It's a particularly good way of exploiting the options you have only when working digitally, as you'll see. Here is a selection of drawings from my (very!) old sketchbooks. They were produced over a period of years, and are quite unconnected with one another. I scanned them all into Photoshop, and began to cut bits from each drawing and paste them into new layers within a new document. Very soon I had a varied and extensive "tool kit" of body parts to play with. I then began to experiment with these bits and pieces, moving them around to see how they might fit with one another. Photoshop's transformation tools are very useful during such procedures; the scale, flip, and rotation tools help to fit disparate sketch components together more effectively. Eventually I had a selection of patchwork characters, ready to be worked over. (I also had a "thing" born by merging two creature sketches, produced for no other reason than wanting to see what it would look like!) So, after desaturating the Frankenstein sketches I increased the lightness before turning them light orange. These orange-line

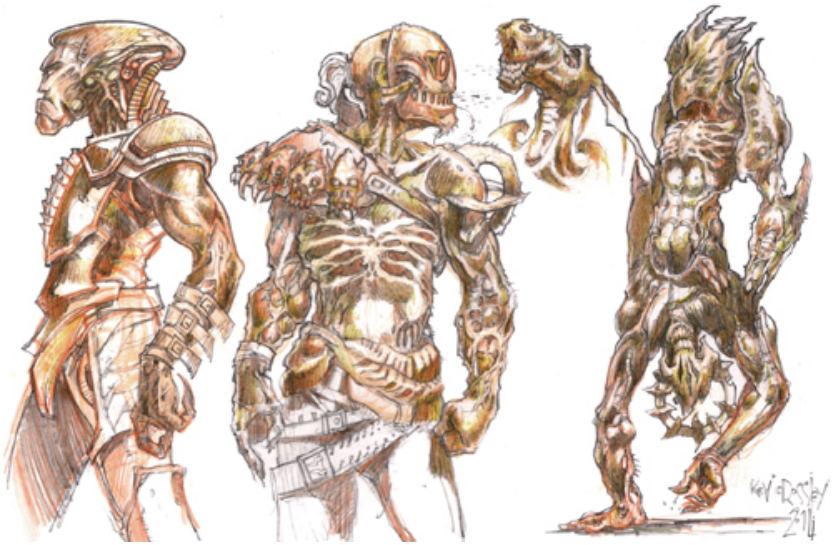
versions were printed onto high-quality Bristol board to be used as the starting point to produce some new, more developed sketches using orange Col-Erase and standard 2H and HB pencils. One of the best aspects of using this method to rustle up new character concepts is that if I use the same sketchbook thumbnails and doodles to do the same thing in a year's time, or five years' time, I'll produce an entirely different set of "new" character concepts, even though I began using the same tool-kit parts. (And just like the famous monster created by Doctor Frankenstein himself, some of the things I end up creating can be far from what I might have expected, although you don't have to worry about drawings going on a murderous, vengeance-fueled rampage!) The process I've described here is an extreme example though, and if I use the technique, most of the time I tend to start with scans of sketches and thumbnails I've produced with a specific job, project, or character in mind. It's quite simply the fastest way I know of exploring the multiplicity of ideas that potentially exist within a small selection of drawings scattered over pages in sketchpads.



An assortment of very old sketches.



Three new “Frankenstein” sketches. Plus a “thing.”



New sketches based upon the old.

Developing the Ant Women

During the early stages of developing ideas for this book, I also produced a painting workshop for *Imagine FX* magazine, and the subject I chose to illustrate was inspired by a sketch I found in one of my old sketchbooks. (See—I told you they were useful!) The sketch featured a mighty warrior atop a pile of vanquished foes. It was very much in the classic fantasy style forged with verve and dynamism by such luminaries as Frank Frazetta, and although steeped in “Classic Fantasy” cliché, I still quite liked it. I wondered if I might be able to update it somehow. As I was thinking about my Ant People chapter at the same time it occurred to me I could replace the pile of vanquished warriors with my Ant Women creatures. Toward that end, I scanned the original sketch in and turned it light blue using the method described on the previous pages, before printing it out onto my favorite drawing medium, Bristol board. Using my Ant Women template drawings as reference, I began to sketch over top of this digital printout using a blue Col-Erase pencil. When I liked the way it was developing, I switched to an HB pencil to add greater definition and solidity to the lines and shadows. I rarely use more than two colors of pencil for sketching, but a little orange Col-Erase seemed like it might bring something to the sketch, and I continued working into it until my new, insect-like version of my old sketch was almost complete. The final piece in the puzzle was what to do with

the warrior on top of the Ant Women, but the answer was at his feet. Inspired by the insect aspect of his assailants, I decided to turn him into a humanoid spider-like creature. When that was locked down, all I had to do was paint it in acrylics. So an old sketch helped me develop a classic fantasy-style painting with B-movie overtones and just a bit of humor. Result!



An old sketch sparks new ideas.



The finished drawing pulls on numerous influences.



“Attack of the Ant Women” painted in acrylics!

Using Reference

As an artist, you see the world as an endless stream of images that could easily be turned into reference for an image or idea. It can be quite distracting at times, but such is the lot of the creative mind! Once again, Jonny Duddle talks us through an example of how he might collect and use reference material.

"My first sketches come straight from my head, but to develop them further I require good inspirational material. Years ago, finding reference images involved trawling through magazines, trips to the library, and personal photos, which came at great expense with the cost of film and development, and required cupboards, bookshelves, and filing cabinets. Hours could be spent searching, and of course reference libraries need to be organized—an imposing task in itself!

"In this digital age, thousands of brilliant images can be found online, and with a cheap digital camera personal reference libraries can be built up with minimal cost. It's only when you try to draw something that you realize you don't actually know what it looks like. Try to draw a cow without any reference, and no matter how many times you've seen a cow, unless you've drawn one before you'll struggle to produce an anatomically correct cow drawing. Go on, try it and see! This is where good reference proves invaluable. As a concept artist, the goal is to understand your subject in three dimensions, not just one view of it. So, the more reference you can find and the more drawings you make from all angles, the better your understanding will be.

"Here, my picture-book character Rex, the King of Space builds himself a Warbot. Rex lives on a lunar farm, and his Warbot is constructed from his Dad's broken tractors. For this image, produced in 2012, I went back to some digital photos that I took in 2007 outside a pub. There were some vintage tractors; I had my digital camera, and I knew that one day the tractors would be perfect reference for the design of something."

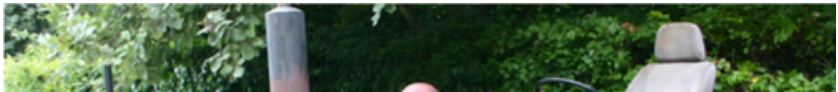
Jonny was doing what many professional character designers and artists do: he saw something interesting and reacted instinctively, taking photos and then filing them away until they just happened to be the perfect reference. So you can see the benefit of investing in a good digital camera if you don't already have one.



Close-up photographs of the vintage tractor.



Rex, the King of Space gets his Warbot!





The old tractor in all its glory.

A Fun Guy

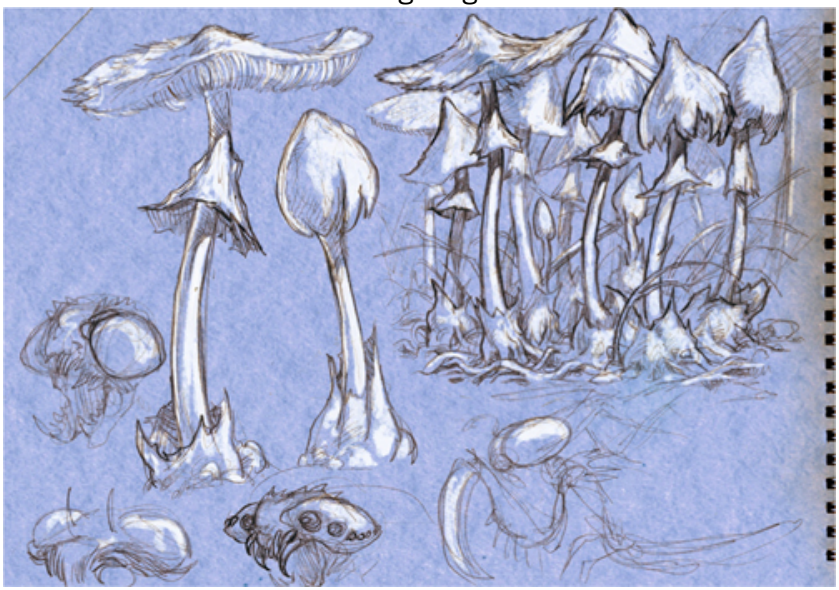
Here's another example of how I used reference of a different sort when developing a creature concept for one of my own stories. (Monsters are characters too after all!) The creature I wanted to design inhabited a forest that was formed entirely out of huge fungus species rather than plants, and I knew it needed to blend into its surroundings. Mycology has always been of interest to me, partly due to the bizarre range of shapes and forms fungi take, and I've incorporated many such forms into my fantasy art over the years. While looking through my folder of botanical illustrations (I don't just do fantasy and concept design), I came across a painting I did of deadly poisonous toadstools called *Amanitas*, including the pure white *Amanita virosa*: the "destroying angel." This fungus is completely white and seems to shine in the undergrowth of woodland where it grows. I thought it would be interesting if the fungus forest in my story actually had entire groves of giant versions of these toadstools, and my creature was some sort of giant insect-like monster that lurked among them, camouflaged.



My original mushroom painting.

I began to sketch these six-foot-tall “Virosa Toadstools,” but unlike their six-inch-tall, real-world counterparts, my versions grew from a twisted matt of branch-thick roots, which coiled and heaved over the forest floor. I then tried to imagine what the creature might look like as it hid within this unnatural thicket. It would need to be thin, but capable of extending itself to great height, and pure white in color to match the mushrooms. Then the perfect insect to use as reference came to me: a mantis. These animals are slim, with long legs that can fold against the body to enable it to merge into the background as it waits for prey to come close. So, I filled the page with sketches of such a creature, mutating the shape accordingly to take into

account the likeness it would share with the Virosa Toadstools against which it would camouflage itself. I flattened the abdomen, and had the creature holding it against the ground, adding surface details that resembled the curving fungus roots.



A new page of sketches inspired by the destroying angel toadstool.

I then used these drawings as the starting point to build a new sketch, adding more definition and with greater anatomical consideration. Instead of just two stabbing mantis “daggers,” I gave it several pairs, and extended the mouth from beneath the hood of the head all the way down the “belly” of the thorax. I wanted to design something that would appear quite beautiful, in a distressing way, if viewed from above or at rest, but when it attacked all you would see were claws, fangs, and the gruesome interior of the beast. As for the name of this vile creature? Well, it could only be the same as its fungal namesake: The Destroying Angel Mantis.



Thumbnail sketches of the mantis-inspired creature.



The final sketch of The Destroying Angel Mantis.

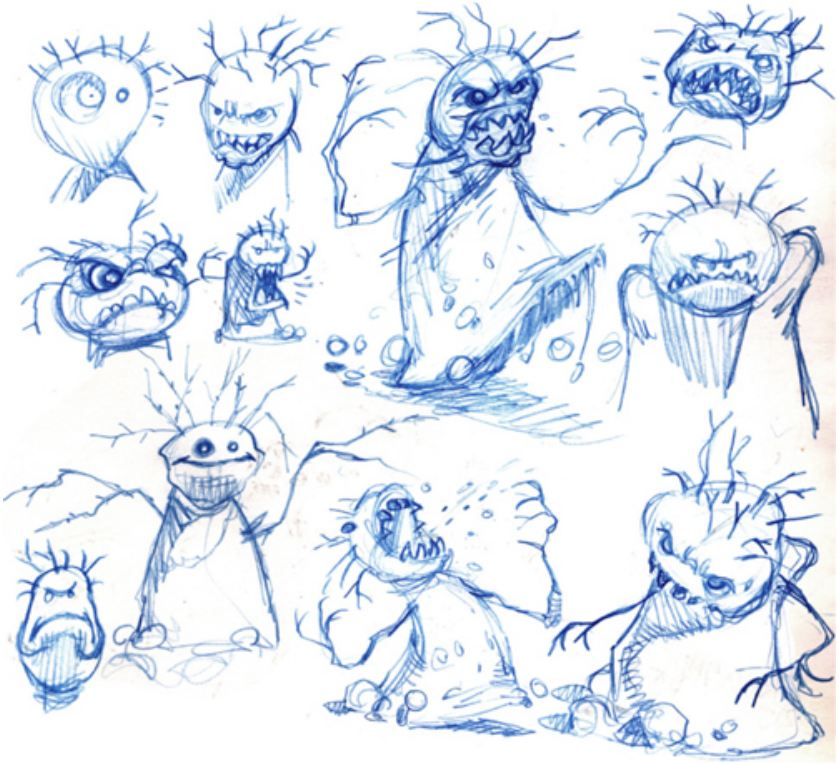
Stickhead, The Snowman

While out in the park during a snowy January day, we built a funny snowman with lots of sticks for his hair and arms. It wasn't a particularly remarkable snowman; it didn't have a carrot nose and there was no way I was going to give up my scarf for it either. However, something about it captured my imagination, so I took a few photographs and headed home, where later that evening I made

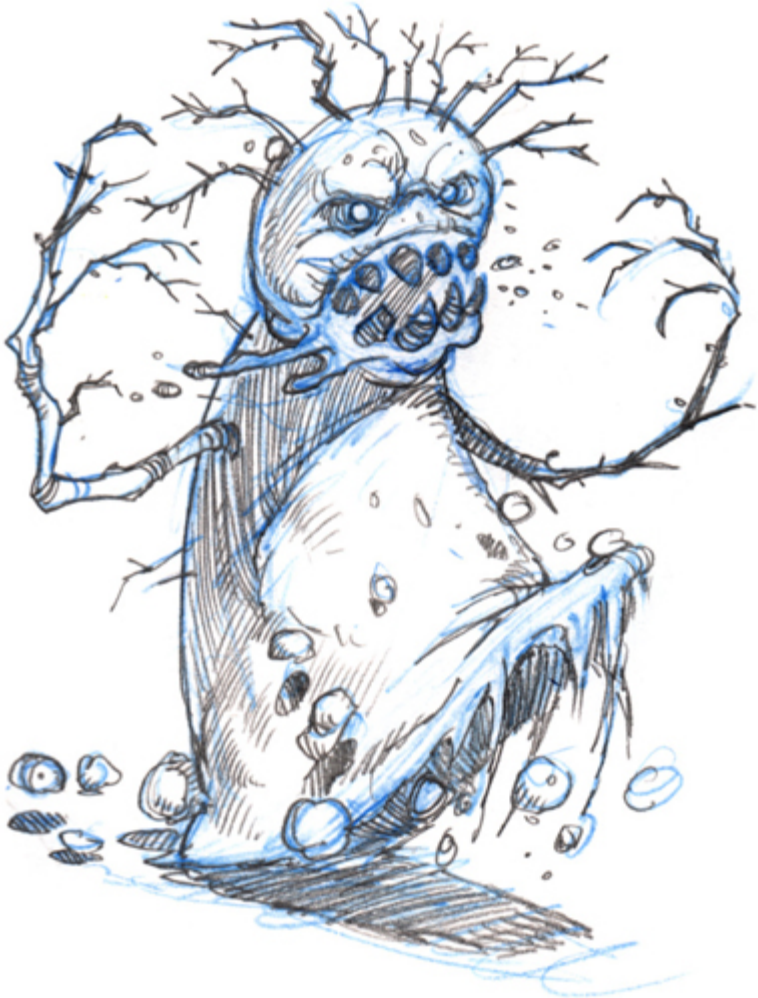
a hot, chocolate pudding. (I'll come back to that soon!)
Months later I rediscovered the pictures in my photo folder on my PC desktop and thought I'd have a go at creating a character based on our now long-gone snowman. But what sort of personality would it have? The more I looked at the photo, the more I knew it would have to be angry. Well, wouldn't you be angry if your maker forgot your carrot nose? In the same folder as the snowman I noticed a photo of the chocolate pudding I'd made the same day. Chocolate sauce was oozing down the sides. Tasty! I picked up my sketchbook and a pencil and made a few sketches of an angry snowman beast. It was looking good, but needed something else. Then I remembered the saucy dessert! Bingo! I made a new sketch, but added some goopy, oozing stuff coming out of its eyes and mouth and some more trailing after it. A few rocky boulders embedded into its icy skin seemed like a good idea, so I used those to emphasize the brow and armor the arms and jaw. I had no idea what this character would become when I started, but with a bit of help from the pudding, I'd created some kind of icy bog monster! If ever there was a better argument not to abstain from dessert, I can't think of it.

The snowman and chocolate-pudding reference photos.





A page of angry snowmen sketches.



A tighter drawing based on one of the thumbnails.



A new drawing of Stickhead with added chocolate sauce.



The finish character of Stickhead!

Developing Thumbnails into Characters

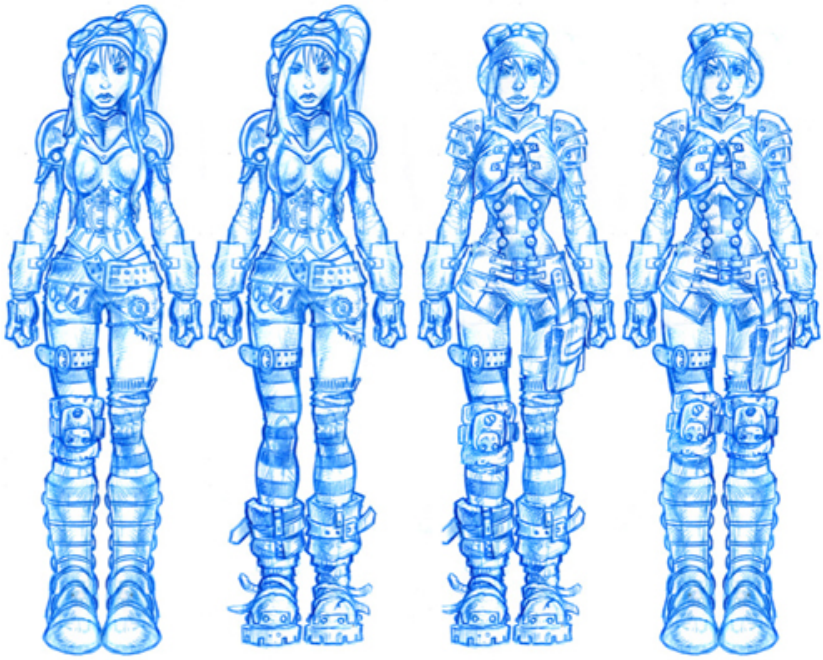
The steampunk genre is something that's appealed to me for some time now, and I suppose my interest in it was piqued after reading H. G. Wells' classic invasion-paranoia masterpiece *The War of the Worlds*. When I read it as a child I'd never even heard of steampunk, but something about the way the writer described alien fighting machines that subscribed to a very Victorian engineering sensibility and design aesthetic resonated with me.



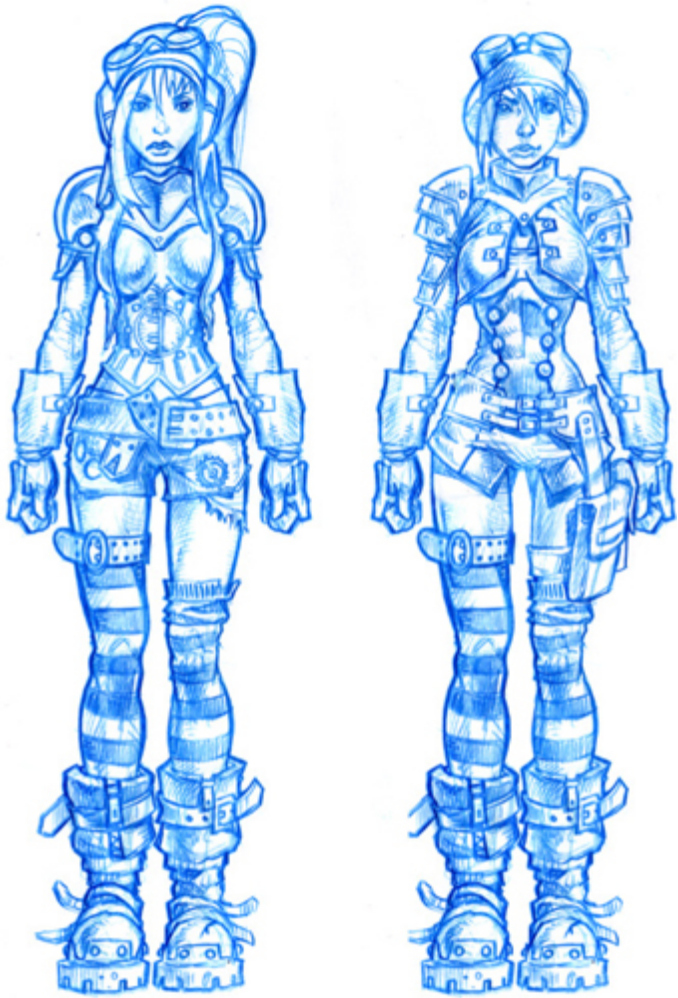
A page of costume ideas for the adventurer.



Finished pencil concepts are produced using templates.



Variations featuring different boots and kneepads.



The designs are completed using Photoshop to copy/paste limbs.

Steampunk Salvage Adventurer

While thinking about the book recently it inspired a story idea: Imagine a world where the alien invaders were not wholly wiped out, but survived, albeit in much reduced numbers. What if the British Empire and its allies managed to retro-engineer just enough of the alien's technology to build their own fighting machines and take the fight back to their extraterrestrial enemy (a flight of fancy given voice by a character in the book)? I imagined this would lead to a sustained war lasting decades, and during that time, although technological advancement would continue, stylistically some archaic fashions and trends would persist into the present day. In this

instance, what would a “contemporary” population raised in a world united in war against an alien invader look like? I chose a young woman as my character; she wasn’t a soldier (although she was armed), but she would be physically capable—young, but tough and worldly. It occurred to me that she was an adventurer who worked as a salvage hunter, tracking down alien tech to bring back to the Terran Science Corps! Now her backstory was in place, I set about designing her clothing as my starting point—because with steampunk, style is the leading factor.

I wanted to strike a balance between attire that was practical yet looked cool. For inspiration, I looked at costumes I’ve seen at comic conventions and steampunk fairs. My character would have to be able to move fast if the need arose, so I gave her a supple, light outfit: a small jacket with high collar over a vest and corset, pinched to accentuate her small waist. Broad belts would be wrapped around her waist and hips, possibly with bags and pouches attached. I gave her shorts with fastenings up the sides, and black-and-white striped leggings that extended above each knee, then added tall boots with buttoned spatterdashes. The design of these was a melding of classic spats with those designed by modern steampunk haberdashers. Finally, I reasoned she might need some protection during her risky line of work, and added some simple plate armor over her shoulders, knees, and elbows, finished (perhaps bizarrely) with an extended bevor or gorget to protect her neck. I made a few visual notes about the possibility of incorporating assorted buttons, cogwheels and other knickknacks.

I then used one of my front-facing character templates to produce a complete design based on my page of sketches and notes. Using a second template, I explored a few more ideas. You’ll notice from the scan that I missed an arm off the first drawing, and neglected to include any arms, and most of the legs, on the second. This is simply to speed up the workflow, as there is not much point in doing unnecessary work. After scanning into Photoshop, I copied and pasted three extra copies of the arm, flipping where required to complete each figure, and I did the same thing to give the second design legs. Finally, I created two variants of each design, each trying out a different pair of boots and kneepad configurations, before producing a final drawing using a more dramatic posture.



A finished character design.

Aidan's Deep-Space Ninjas

My son, who is five, had some homework that involved him inventing and drawing the coolest toy he could think of. That weekend I was away at a comic convention, sketching and signing books, and after a hectic couple of days I returned to discover my offspring had indeed come up with the coolest toy idea ever: Deep-Space Ninjas. The Force, I could tell, was strong in this one. He'd also done a pair of small, annotated drawings so the toy manufacturers would know what they'd look like, and it got me thinking: What if I were to use his thumbnail-sized drawings as a starting point for some character design of my own? An intensive period of contract negotiation

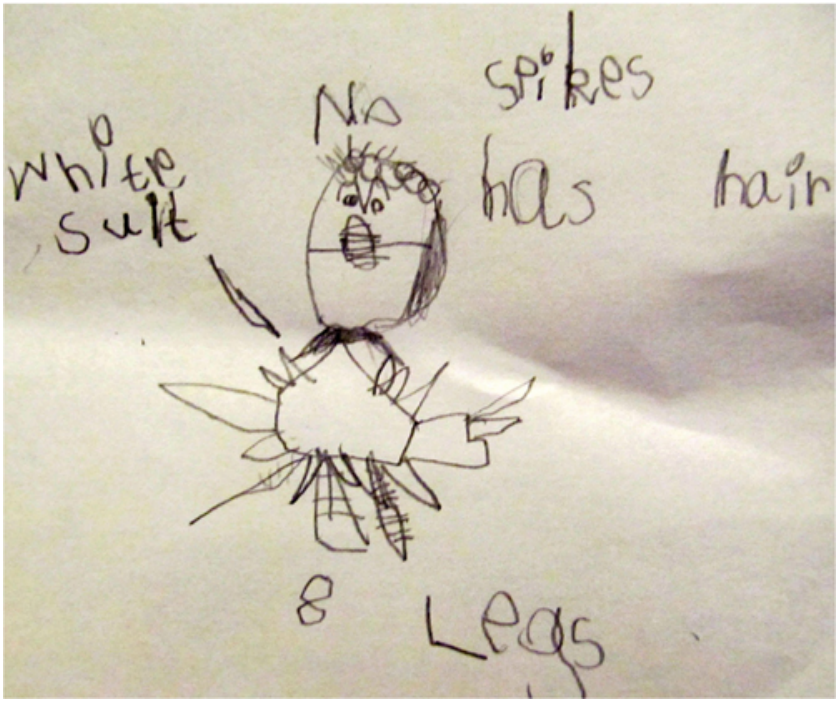
followed, and after we'd eventually agreed on his fee (a Lego Galaxy Squad Hive Crawler set), I was free to develop my versions of his Deep-Space Ninjas.

My first step was to produce a page of doodles based on his drawings and the descriptive notes he included. For the red-suited Deep-Space Ninja, I had to consider the spiked head and the four little legs beneath the body. What sort of character would have legs like that? As it also had two arms I reasoned it might be insect-like, but as I set about filling a page with sketches, my first attempts started to look more gnome-like. Was this Deep-Space Ninja a four-legged gnome? I turned my attention to the white-suited Deep-Space Ninja, which had hair, no spikes, and eight legs! This detail presented me with various options. I could either make it into some sort of spider character or perhaps an octopus. I did a few sketches exploring each idea, and presented my initial findings to my son. He didn't like the spider so I did new drawings, this time evolving some of the ideas from the octopus sketches, which resulted in the concept that the ninja would be seated inside an eight-legged contraption of some kind. Tentatively, I took my new drawings to show my son, whereupon I was forced to engage in a game of hide-and-seek before he would look at my work. (Clients can be difficult sometimes.) He liked the robot suit idea, and during that consultation I also learned the squiggly shape in the center of each face was in fact some sort of breathing apparatus, which I suppose you would need if you happened to be a Ninja operating in Deep Space. With this in mind I started work on a new page of ideas.

By necessity, my first drawings were in a very cartoonish style, but as the process developed, my style evolved and became more "muscular" while still retaining a cartoonish aspect. I took the strongest elements from my first page to create some more rounded, fleshed-out versions. Unable to choose between the octopus and eight-legged mech, I decided to produce versions of both. Finally, I scanned these new drawings into Photoshop, produced light-blue versions, and printed these out onto high-quality art board to work over again. Using a blue pencil, I simply tightened up the concepts, adding a few extra embellishments including extra breathing pipes and more straps for weapons. I was quite pleased with my finished concepts, but more importantly, so was my son, who rewarded all my hard work by ambushing me while fully armed with a shield and a (very hard) plastic battle hammer (ouch).

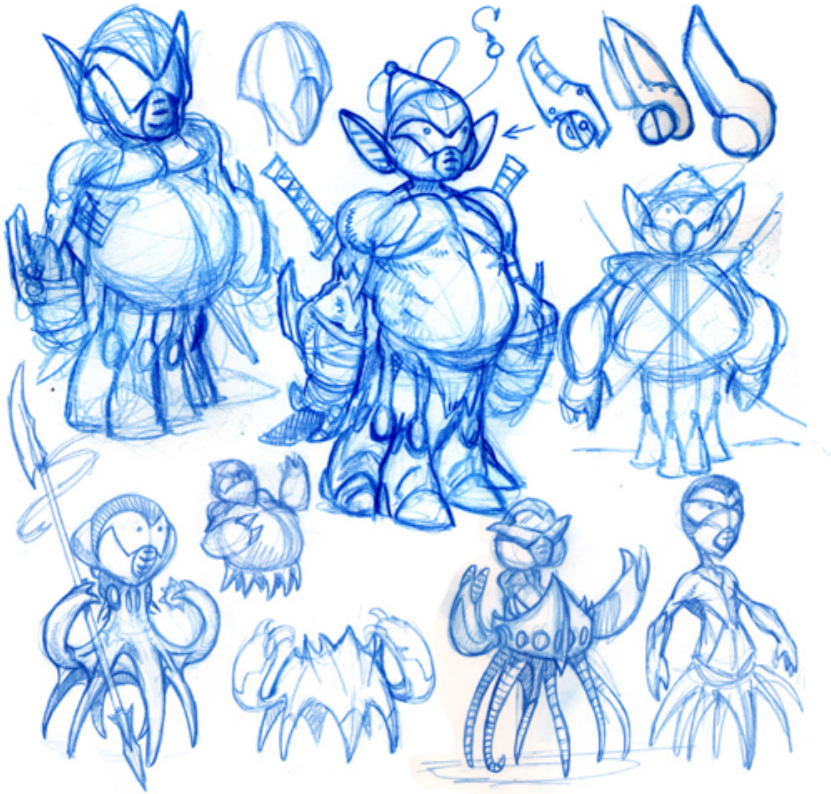
Aidan's Deep-Space Ninjas drawings, fully annotated.



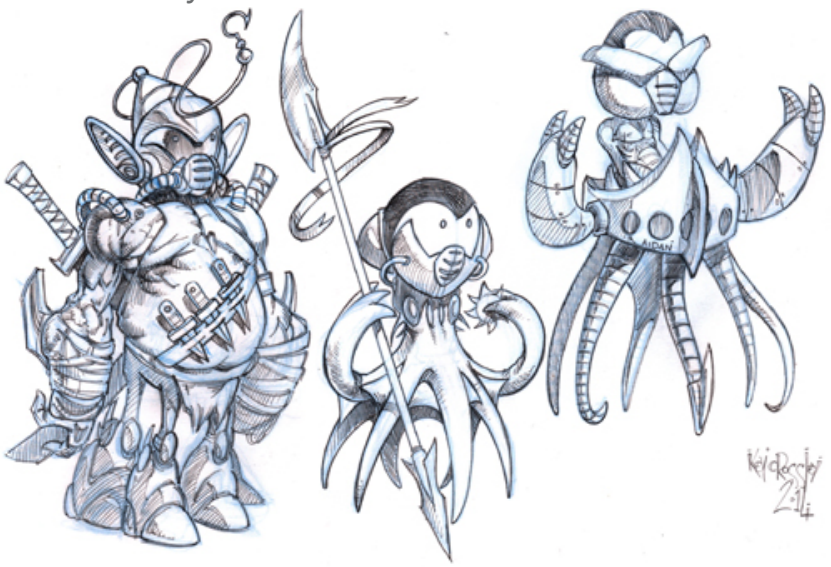

No spikes
white suit
has hair
8 Legs



A selection of my first thumbnails.



My second sketches were more refined.



Something Old, Something New!

I wanted to see what else I could dredge up from my old sketchbooks, and sure enough I found another old drawing I'd done, this time using black ballpoint pens and pencil crayons. This one dated back to 1994 and was of a straightjacketed lunatic with various missile launchers attached to his head and shoulders via huge segmented pipes. I can't remember what I designed this for, but the more I looked at it, the more it seemed a shame I'd never taken it further. Despite the lack of finesse in its rendering, I could definitely see some potential in it, so I resolved to give it a fresh overhaul.

The glorious strangeness of the concept was spoiled a little by my clunky rendering and clumsy anatomical drawing, but these issues would easily be remedied during the final rendering of my new concept—whatever that might be. Toward that end, I picked up my current sketchbook and began by doodling a few new thumbnails. My original drawing style was rather overworked, so I kept my style light and loose this time around. I softened the forms of the pipes and mechanical boxes and appendages, and even contemplated reducing his arms in one sketch. While looking at the weapon objects positioned over each shoulder, it struck me that the one on his right looked like some kind of metal insect, so I removed the pipes that embedded it in his body, and decided to have it "sitting" on his shoulder instead, digging its sharp legs into the skin. For the other shoulder, I opted to go to the other extreme and produced a few sketches where the missile pod was so huge it was attached to the entire left side of his upper torso, replacing his arm entirely. I now had all I needed to produce a new drawing!

I picked a cool-looking template and began to build a new version of the character. I chose to end his right arm halfway to the elbow, and removed the straightjacket because, let's face it, it would be impossible to put on if you happened to have a huge missile pod bolted to your shoulder. I'm a fan of pipes, so I included lots of those, and gave him small, pig-like eyes that helped to make him look suitably deranged.



New thumbnails inspired by the original.



The original twenty-year-old drawing.



The brand new version.

Drawing: Paper versus Photoshop

"Quality is never an accident. It is always the result of intelligent effort."

—John Ruskin

When I was nineteen, I spent a year at art school, where we would do life-drawing classes at least four times a week. At the start of one lesson we were given an actual stick, from a tree, with a pot of black ink, then instructed to spend no longer than fifteen seconds on each figure drawing, after which amount of time the model would change position. At first, I hated every second, and then I was too intent on trying to finish a drawing before the model shifted to think too much about anything else. By the end of that lesson I was physically exhausted, covered in ink and with a shoulder and arm that felt like jelly. It was electrifying! I had filled sheet after sheet with loose, spattered scrawls; the twig had scratched and torn the paper; and as much ink had found its way to the floor as it had the paper, but it was the most exhilarating afternoon of drawing I'd ever experienced.

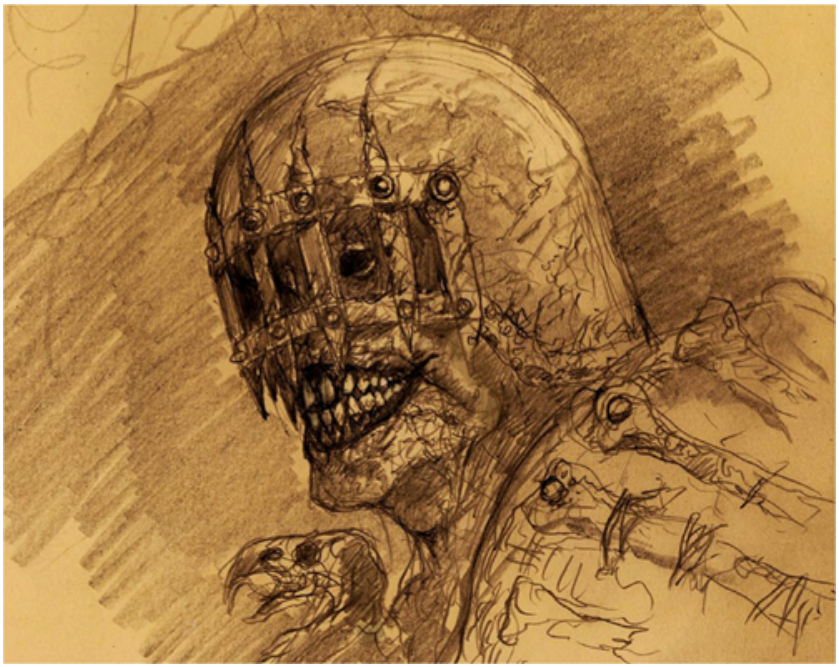
Years later, when first confronted with a version of Photoshop that offered a reasonable digital alternative to traditional drawing, I steadfastly refused to engage with it. I felt that although a computer could be useful for producing graphics and adding color to scanned art, they were redundant as drawing tools in themselves. A friend of mine recently noted that he simply didn't have the time to learn how to use computer software, whereas pencils are so easy to use: "You pick 'em up, sharpen them, and use them. You don't need a manual; it's instinctive." This echoed my initial attitude perfectly. Eventually though, I came to appreciate my previously stubborn stance had been a little harsh as I was slowly won over by the unique attributes and options presented by the computer. A friend of mine, David Millgate, noted that computer software is just a tool, and any tool that helps you create good art is valid. However, the key point (which I hadn't considered when I was younger) was that you can't digitize the creativity that must always be present in the artistic mind. No matter how you get to the finished piece of art, there must always be that "spark" of an idea first and foremost! Andrew Wyeth similarly had no prejudice against any technique. He said the limitations lie with the artist, not the medium.

In this chapter I want to look at the key differences between these two methods of drawing: how each approach offers a unique creative experience with comparable results and how they can be used

together to expand your creative options.



This movie character design was completed very quickly, as the loosely applied penciling shows.



A fantastically atmospheric pencil sketch of Judge Death by Dave Kendall.



A tight, finished drawing of Judge Dredd, showing a range of different line techniques.



These character designs for a film were done using a pencil before being scanned and tidied up using Photoshop.

Working Traditionally

"We all have 10,000 bad drawings in us. The sooner we get them out the better."

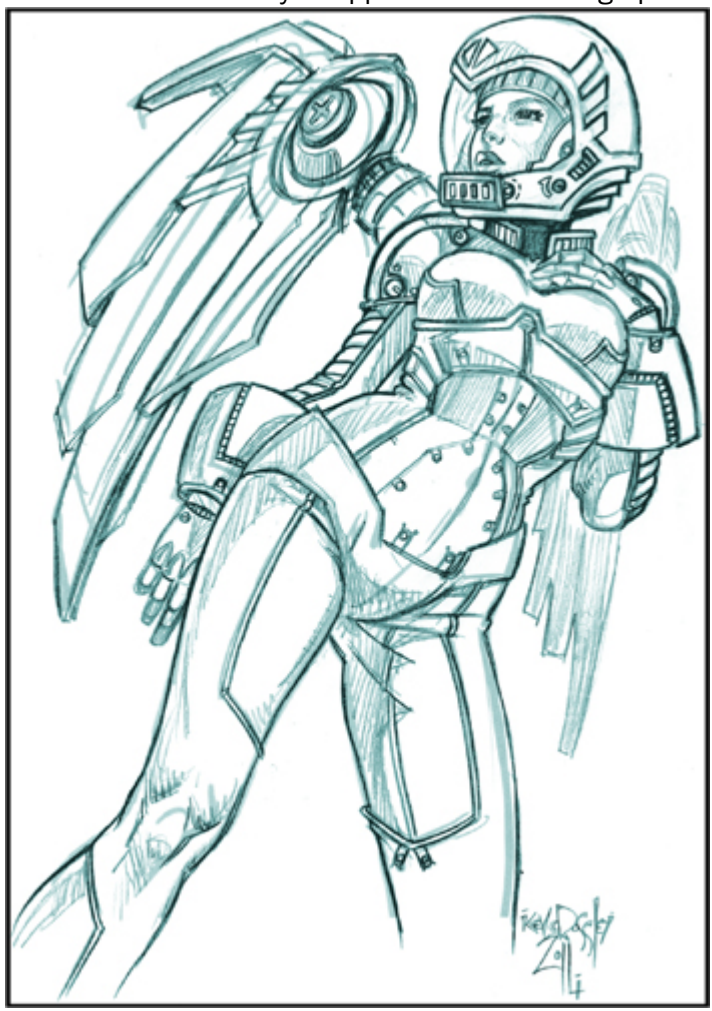
—Walt Stanchfield

When my interest in making art became serious and I knew that I wanted to turn it into a future career, the only option available was to pick up a pencil and a sheet of paper and draw. This might seem old fashioned to many young artists these days, but to others of the "Digital Creation Generation," drawing traditionally has developed an exotic allure that I find both encouraging and ironic. In an age where using a computer to draw is the norm, those who choose to use a pencil and paper are sometimes seen as "forward thinkers"!

There is something special about working with a pencil. The tip will blunt at different speeds and in different ways depending on how you use it, and at what angle you hold your hand. These variables and the ever-evolving shape of the tip offer an almost endless variety of textures, line shapes, and finishing effects that are always surprising —and all of the above can be changed again depending on what paper or art board you work on. For sheer expressivity and breadth of varied application and technique, it has no equal, at least for me, and every project I undertake begins as a pencil drawing in a sketchbook. It is possible of course to recreate many of the exercises in this book using a stylus and tablet, but it is my hope, if you haven't already, that you'll invest in a set of pencils and discover for yourself how versatile and rewarding working traditionally can be. There is simply nothing to compare with it.

One of the common criticisms I've heard about traditional methods is that they can be messy. I can't deny that, and barely a day goes by that I don't have to clean up after a nasty case of "drawer's hand." (This is where the action of moving your hand over a paper covered in pencil creates a smudgy mess between your outer wrist and little finger.) That said, the messiness is an essential part of how you interact with your art, and besides, I've made numerous random serendipitous technical discoveries due to the messy nature of working traditionally. This simply isn't possible when using a computer. When working with soft pencils, crayons, chalks, and pastels, you have the option of using your fingers or a cloth to adjust textures and create effects, and excess smudging can be removed or worked into using a variety of erasing techniques. From a purely gratifying perspective, finding your desk covered in bits of eraser,

pencil shavings, and other detritus, as well as dirt under your nails and even on your face after an artistic session is an indicator of a day well spent. It's a tangible sign that you've really connected physically with your work, and this engenders a state of mind that is invaluable in relation to how you approach future design problems.



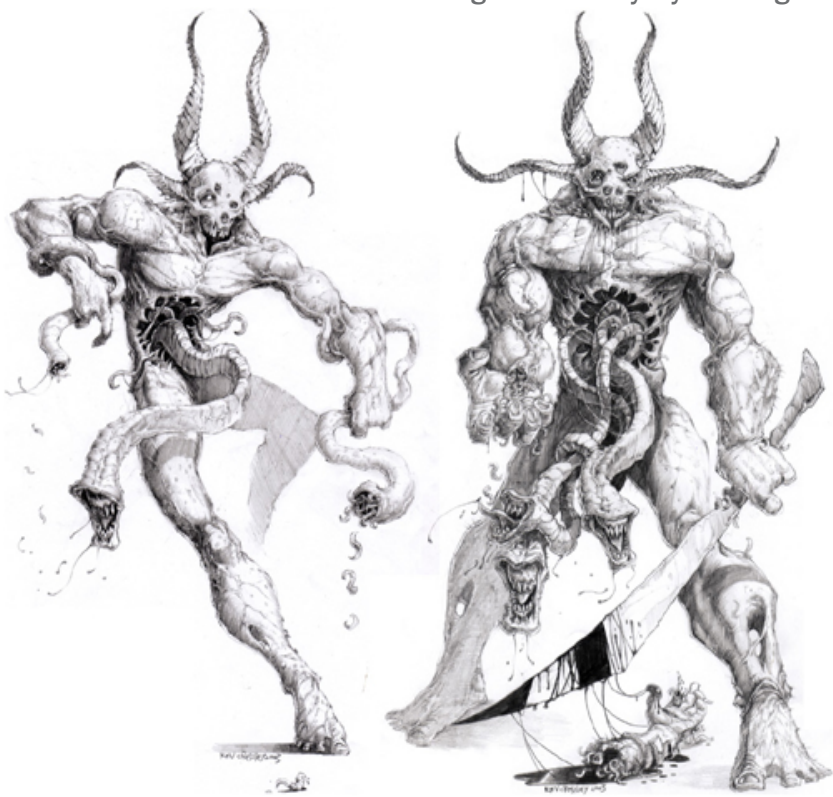
This sci-fi character design was drawn using a blue Col-Erase pencil over a printed digital template.



This penciled panel from a comic clearly shows how messy traditional working methods can be.



A selection of wonderful life-drawing sketches by Dylan Teage.



These demon characters for Green Ronin show the depth and volume possible when using only a small range of pencil grades.



This pencil drawing was inspired by a Photoshop doodle.

Working Digitally

"All art is but dirtying the paper delicately."

—John Ruskin

During the past fifteen years, the way artists work has been transformed radically due entirely to the unstoppable evolution of computer technology. As a student in 1990, I was so opposed to using the computer as an artistic tool I designed an entire project that vilified the concept! (It wasn't very good.) Within a few years of leaving college I found myself working in a studio producing 2D graphics using Photoshop, but still reluctant to actually draw with it. That was until two of my friends sat me down and forced me to try out my brand new graphics tablet and stylus, something I'd avoided for months. They wouldn't let me leave my desk until I got to grips with it, and after forty-five minutes I was a convert. I was forever grateful to them for encouraging me to work outside my comfort zone —so Sid and Nick, here's to you guys! This is the way I still work, almost twenty years later, happily swapping and changing between a real pencil and its digital counterpart.

Now, although I remain steadfast in my opinion that digital drawing is not as satisfying as the real thing, it can nevertheless offer a quick way to explore ideas with the added value of being able to make instantaneous changes. This unique selling point made working digitally absolutely invaluable, and once I began to see the benefits of this built-in "safety net" I never looked back. In fact, during the time I was developing my new computer skills, the digital functionality became so ingrained that I found myself automatically trying to press Ctrl+Z (Undo) if I made a mistake while drawing with a real pencil! So, this duality caused a bit of conflict in my brain as I attempted to remold my working methodology to encompass this distinctly new way of working, but the gains were worth it.

Having spoken to artists about working with Photoshop, many agreed that the major pros of the medium are the undo feature, the ability to work on numerous layers within a single image file, and the simple speed in which ideas can be explored and nailed down. Other points in favor of digital were that there was less fear of making mistakes, the lack of need for paper, the lack of mess, and the ability to quickly make changes as you work. Here are a few more thoughts from some of my artist friends:

"I love to draw by hand but the graphic designer in me has pulled

me more toward digital. I love the ease of use through the relevant software, layering, color correcting, and nailing an idea down through the use of custom brushes."

—Rich Johnston

"I love working with pencils; after all, if it was good enough for Leonardo (Da Vinci), it's good enough for me! However, he would probably have loved an iPad!"

—David Millgate

"I never ever plan images using pencil. Digital allows you to iron out mistakes which traditionally would have meant a complete redraw. I would never go back to designing comics with blue pencil. However, I do like to draw over my final blue printout."

—Dave Kendal

"I find traditional sketching much more free flowing and natural than digital, and I often sketch out ideas with a pencil before working digitally, but they really are the roughest of thumbnails that I'd never show to anyone else. When speed is required, especially for remote clients, Photoshop is the best option for quick concepting."

—Martyn Rotherham



I did this sketch of Octoman using a ballpoint pen while chatting on the phone.



I then produced a more complete render using a blue pencil.



Finally, I scanned the blue Octoman into Photoshop and quickly sketched some costume options in new layers over the pencil layer.

Personally, although I still do all initial roughs (comic page layouts, etc.) as pencil thumbs in my sketchbook, I've found myself incorporating digital working into the process a lot more over the past few years. Final drawing is still always traditional for me, but a lot of the bones of how I work out a composition are digital in nature. My nineteen-year-old art-student self would not have believed this, but I'm not sure I could go back to being just a traditional artist again—at least, not easily.

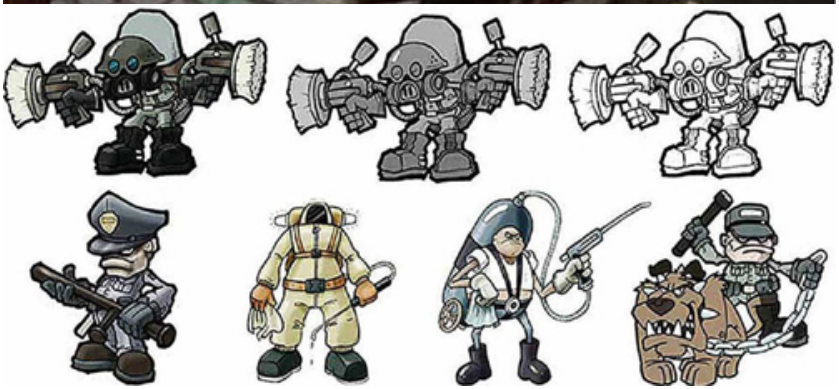
I've included a couple of images I produced entirely in Photoshop. The first is a template I did using a basic round brush with opacity

set to 100%. I set the foreground color to black, and the background color to white. After I'd built the initial skeleton of the character template I began to add definition, keeping the brush quite large except for the face where a little more detail would be useful. I then commenced swapping between the fore- and background colors to keep making adjustments until I had a body shape and posture I felt I could work with. Next I continued to make a few further additions to the costume before adding flat color to give some definition to the character. This was great fun to do, and although it lacks the nuanced texture and physical feedback of working with pencils, it was very quick to do, and I now have something I can develop further (you might recognize the pose from earlier in this chapter). Plus, when I'd finished drawing it, my hands were clean!

These color sketches by Martyn Rotherham were all completed using Photoshop.



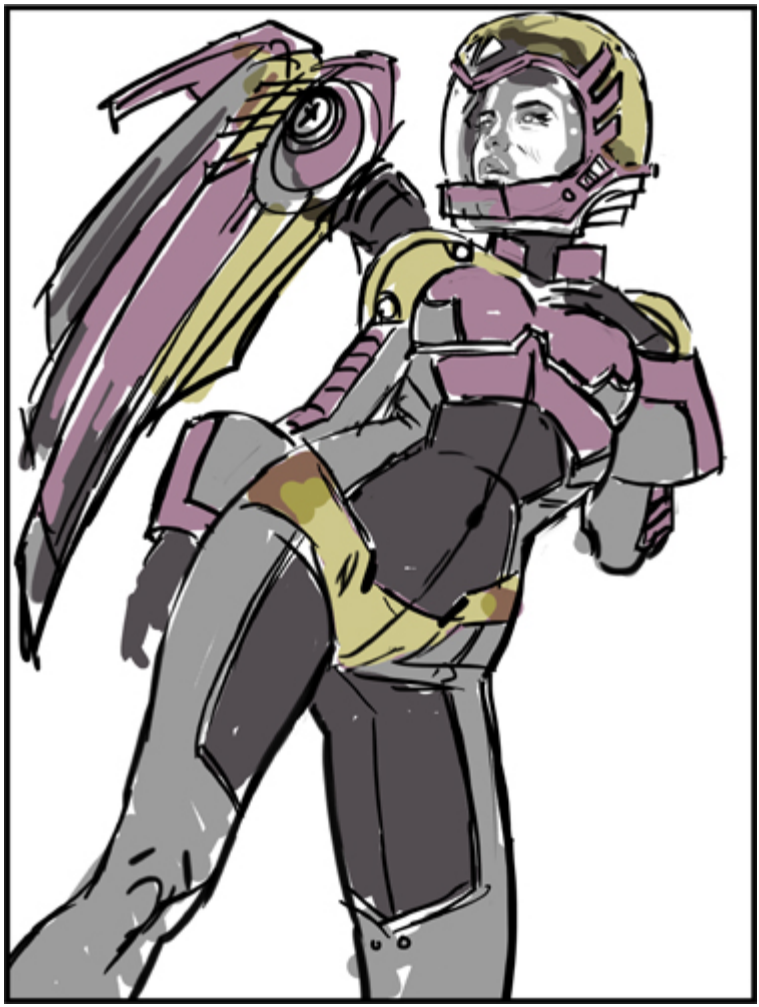








This template was quickly sketched in Photoshop using a basic brush set to 100% opacity.



Still using Photoshop, I built a quick character design over the top, finished with a few basic colors.

Working Tradigitally

To round off this chapter, I thought I'd show how I use both traditional and digital techniques to work toward a creative goal. A few years ago, I was asked to produce an inked drawing of a "zombie dog master." I began by doing a few doodles of demonic-looking zombie hounds, but they were really very rough, more of a way to explore ideas rather than to produce anything finished or polished. I then scanned these into Photoshop, tidied the page up, then split the dogs apart, cutting and pasting each into its own layer within the Photoshop document. With each layer set to Multiply, I could then

move them around and use the transformation tools to modify them until I had arranged them in a way that looked pleasing. As it turned out, I didn't need the spider-faced dog (although I might use that in another image one day).

The next stage involved increasing the size of the canvas and positioning the dogs at the bottom of the page. I then used a basic shaped brush with varying opacity and size to sketch out a rough pose and design for the dog master himself. I used a scanned sketch as the basis for his head, which can still be vaguely seen as little bits of blue under-drawing visible beneath the darker black lines. I developed the posture of the character concept by alternating between black and white to define the lines and composition, sometimes using the transformation tools to scale, rotate, or deform areas until they looked okay. I also worked over the dog forms, adding definition and suggestions of detail for the final drawing.



Pencil sketches of zombie dogs are scanned into Photoshop.



The layout of the composition is sketched digitally, incorporating the penciled dogs.

This digital sketch was then printed onto tabloid (A3) paper. I placed a sheet of Bristol board over this, held it to a window, and used daylight to trace a copy onto the art board. (A lightbox is useful for this kind of work, but as long as you don't work at night, you can get by just fine using this method.) Finally I let loose with the pencils once more to produce a devilishly detailed final pencil render. I kept it quite loose and rough; it was going to be inked so it didn't have to look too polished. As an aside, if you look carefully you'll notice little Xs here and there. This is something I learned from my comic book

artist friends: It's simply an indicator of which areas will be solid black during the inking stage. When I finally started to ink over this pencil the volumes are defined, and the whole thing starts to come to life. Or undeath, depending how the zombie dog master might see it. A white-ink pen is then used to erase and "eat" back into the ink to create dramatic texture and finishing details.

This method of going back and forth between the pencil, ink, and Photoshop is something that never fails to creatively satisfy and inspire me. It's also a reminder that the software is just a tool, a mere link in the chain of creation, and a piece of art should never be judged by the process rather than the execution or idea.



The rough pencil rendering, based upon the digital sketch.



Inking adds an extra dimension to the finished art.

Breaking Anatomy

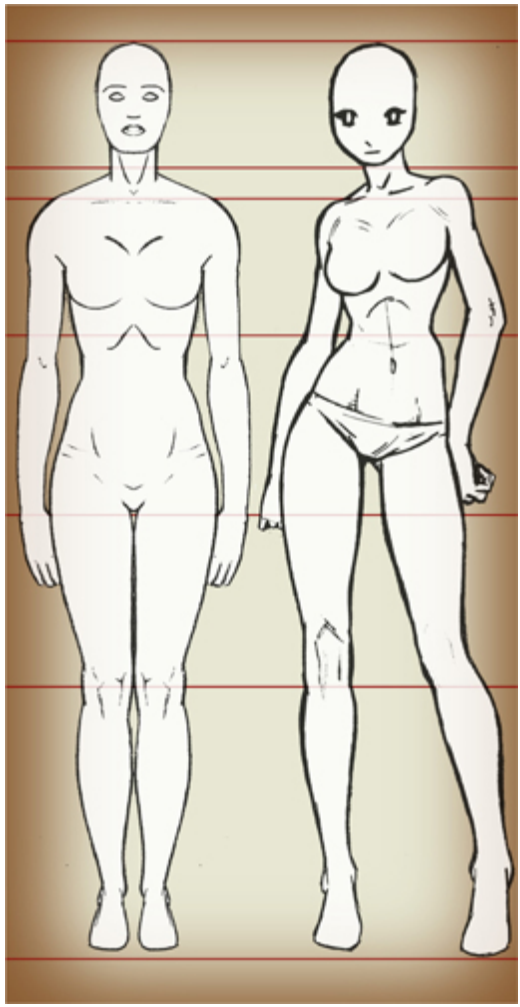
In my last book (*101 Top Tips from Professional Fantasy Painters*—go out and get a copy!), I included chapters about anatomy and how to distort it, but I always felt there was a lot to be said about the subject. Luckily, this book has presented me with an opportunity to pick up where I left off!



This supremely warped creature is still partially humanoid in aspect.



This human female template features more subtle deformations.

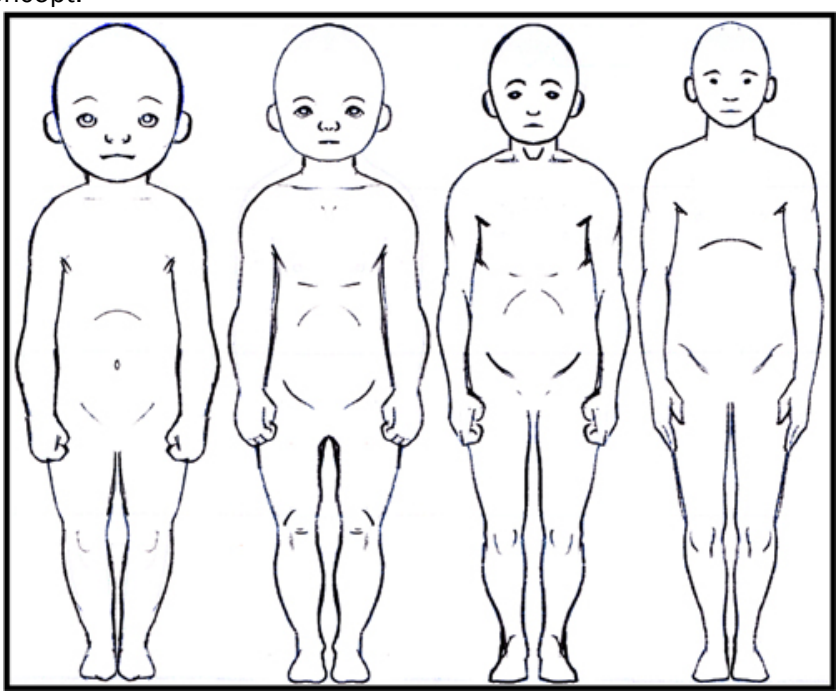


A real body compared with a manga version.

Previously, I approached the subject by simply drawing a few characters with distorted physiques, and I've included a few examples once again for good measure. This time I'd also like to present some real-world examples of how anatomy is being broken, or at least twisted, tweaked, and transformed, all the time. As I discussed on here, you can only break anatomy convincingly if you possess a firm knowledge of the subject to start with, but as you'll see, you don't have to look far or try too hard to find ways of subverting a standard body pattern.

This image shows a drawing of a female body, with correct proportions, and next to it is a drawing of the sort of physique you

might see in a comic—in this case, manga. At a glance, you can plainly see how the changes are implemented almost everywhere. The head is larger proportionately, and in manga the eyes are also greatly enlarged. The neck is much narrower but the shoulders are fairly broad. The ribcage is tapered and pinched in to accentuate the tiny width of the waist, and the classic “hourglass” shape is reinforced by widely flaring hips. The groin area tends to be much smaller, but the greatest change can be seen in the legs. The longest bone in the human body is found in the upper leg, but here the lower legs are at least as long, and the entire legs have been elongated far beyond the usual with the absurd effect that the real leg proportions look wrong when viewed in comparison! Because they are carefully balanced though, these distortions work within the context of the illustration and help create much more dynamic images, an attribute always useful when trying to sell a design concept!

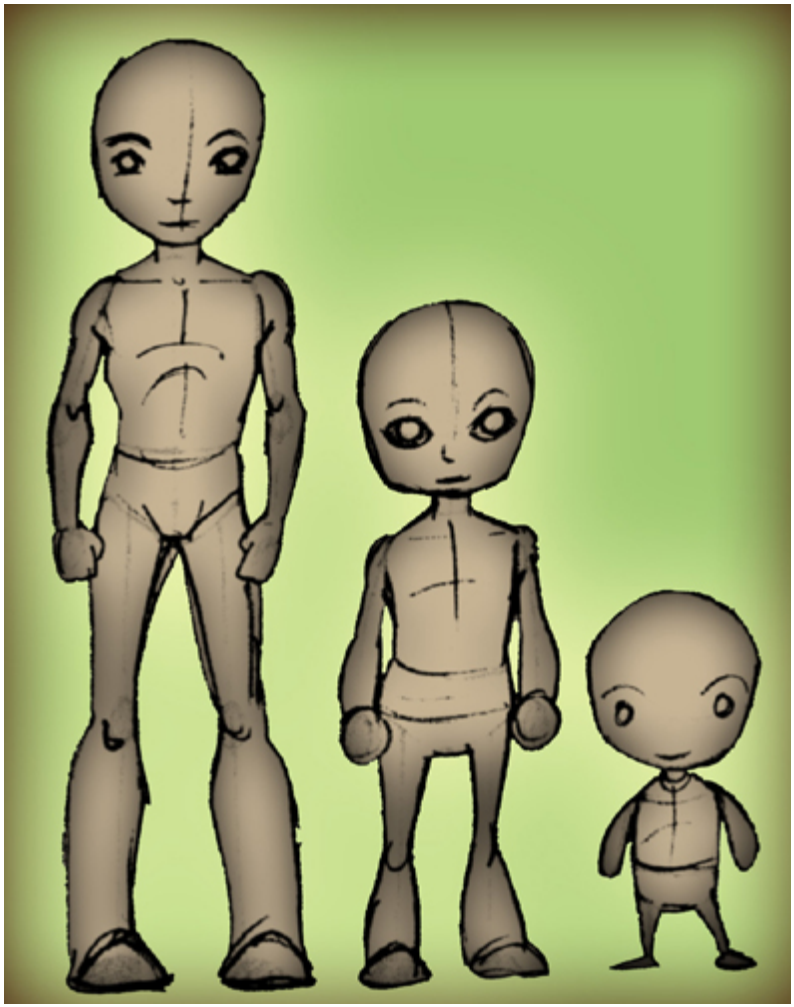


The body changes dramatically throughout childhood.

This is a set of drawings illustrating how body deformation is actually something we all have firsthand experience of. I’m referring, of course, to how we physically change as we grow from a baby into an adult. The four drawings here represent, from left to right, a newborn

baby, a two year old, a six year old, and finally a twelve year old. Viewed at the same height, the comparative size of the head is astonishing, and the subtle lengthening of the legs is also a notable feature. Babies have markedly different body proportions than adults, with a large and heavy head making up approximately twenty-five percent of their body weight. An adult male's head comprises only about six percent of body weight. Viewed like this, it is easy to see how such body shapes can be transposed from a child into an adult design to create an immediate stylistic variation, as seen in the Japanese chibi style.

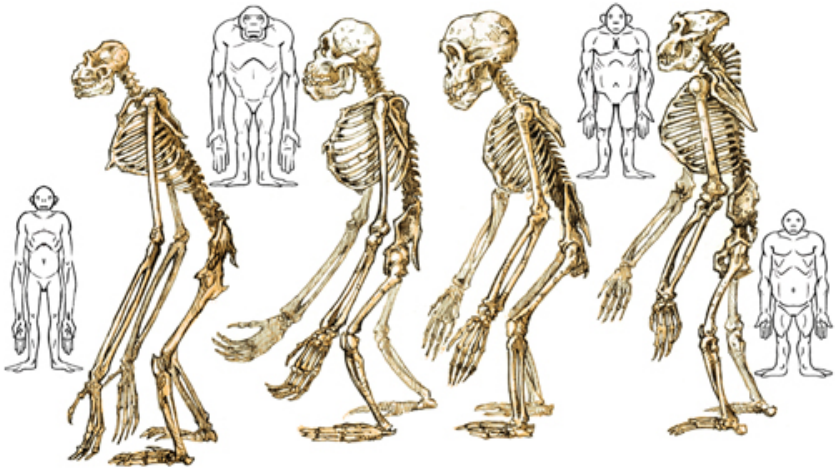
Chibi means "small person" or "child," and is probably where the genesis of the "super-deformed" trend came from, appropriately. This trio of drawings is included to illustrate extreme anatomical deformation. How you define the proportionate shapes of human characters within a given project will define or influence the whole character of the world they inhabit as well as having an effect on how the audience respond to and interact with them. Try producing different versions of the same character using these different body proportions and see how your own attitude toward each one differs. This manipulation of thought and emotional response of the viewer or user is essentially at the heart of all design.



From cartoony to super-deformed.



A teeny-tiny super-deformed ninja.



Real-life primate skeletons.

At a glance these skeletons look very similar to humans, yet with something very wrong about them! Fear not, as they are perfectly normal—if you happen to be one of the member of primates to which these skeletons belong. From left to right these creatures are the gibbon, the orangutan, a chimpanzee, and a gorilla. I've included these studies to illustrate how the human body is simply another variation on a theme, and not even the most recent. Part of a character designer's job will usually involve coming up with monster or creature concepts at some point, and for that it's useful to have as many frames of reference to work from as you can gather. From the age of fourteen, I'd get home from school and start drawing monsters. In the first instance, I simply attached various scary animal heads onto human bodies, and this remains perhaps the most obvious way to economically create creatures that inspire both revulsion and fascination at the same time. The splicing of the familiar with the alien will always help to ground a creature design. These skeletons are a great example of that, and they're not even made up!

The two creatures on the opposite page were each initially human in certain aspects of their design, before I distorted their forms in ways inspired by nonhuman animals. The first is a beast I designed to be some kind of techno-zombie creature. It was once human, or at least it began human before parts were swapped out for bits from other similarly deformed animals and creatures. Although it looks like the monstrous child of a deranged imagination, it is in fact entirely inspired by actual animals (with a bit of a deranged imagination

thrown in).

The next example is essentially a human I've equipped with gibbon-sized arms, and when I did this, it seemed to me a natural step to stretch a fold of skin between those arms and the body to create a monstrous flying mutant of a man. In response to this new functionality, I adjusted his physique so he was quite muscular, particularly across his chest and shoulders. It's an example of how form can inspire function, which in turn can inspire amendments to the form.



This person has been given arms with gibbon proportions, as well as a little extra skin.



A bizarre beast that might have been human, once.

There will inevitably be times as a character designer when you'll be tasked to produce designs for comic-or fantasy-style projects, which is when knowledge of these kinds of distortions of the body, both subtle and extreme, will become extremely useful. Throughout this book you'll see numerous examples of "fictive anatomy." It's something I've studied for many years, and I've now developed my own set of parameters for how I arrange bodily proportions. Push one area too far and the entire body will look incorrect, but with careful consideration it is possible to turn the body into all kinds of configurations that look relatively "natural."

Refining Designs

“When I draw something, I try to build some kind of history into it. Drawing an object that has a certain amount of wear and tear or rust, or a tree that is damaged. I love trying to render not just the object, but what it has been through.”

—Alan Lee



Initial sketches for the centipede “ant” queen.



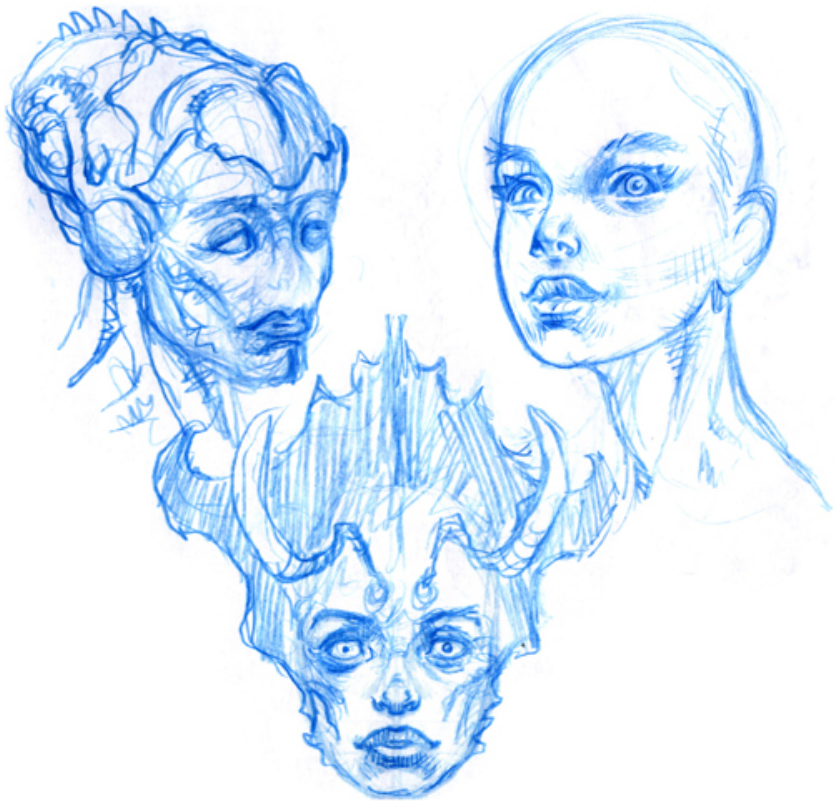
More ideas for the ant queen.

Queen of the Ant Women

When I was developing the Queen Ant design templates on here, an idea struck me for another way to present the queen: What if the queen wasn't an ant at all, but rather another species entirely? What if she was, for example, a centipede? (Well, a centipede/woman-type creature for the purposes of this book.) This inspired me to start thinking about how I could justify the presence of a foreign species at the head of a hive colony, but the answer came easily, inspired by plenty of real examples found throughout nature. The centipede/woman-type creature could be a sort of "hive parasite" who can mimic the pheromones of the ant species and thus control them.

First, she insinuates herself into the hive, assassinates the real ant queen or queens, and then manipulates the feeble-minded drones and soldiers to protect and gather food for her. It's a hard life being a centipede/ant/woman/queen-type creature.

So now that I'd justified such a species departure for the queen, I began filling a page with new sketches. In designing a woman with a centipede body, there was one major problem I had to address: How would I balance it? I wanted this character to retain her womanly aspect, which might be tricky considering the long, segmented nature of her insect attributes. Initially, I considered extending the segmentation right up her abdomen and chest toward her neck, then attaching a pair of human arms to each of the uppermost sections. This might have been interesting, but I felt it might be too reminiscent of the multi-armed Goddess Kali, and I wanted my charlatan "ant" queen to look distinctive on her own merits.

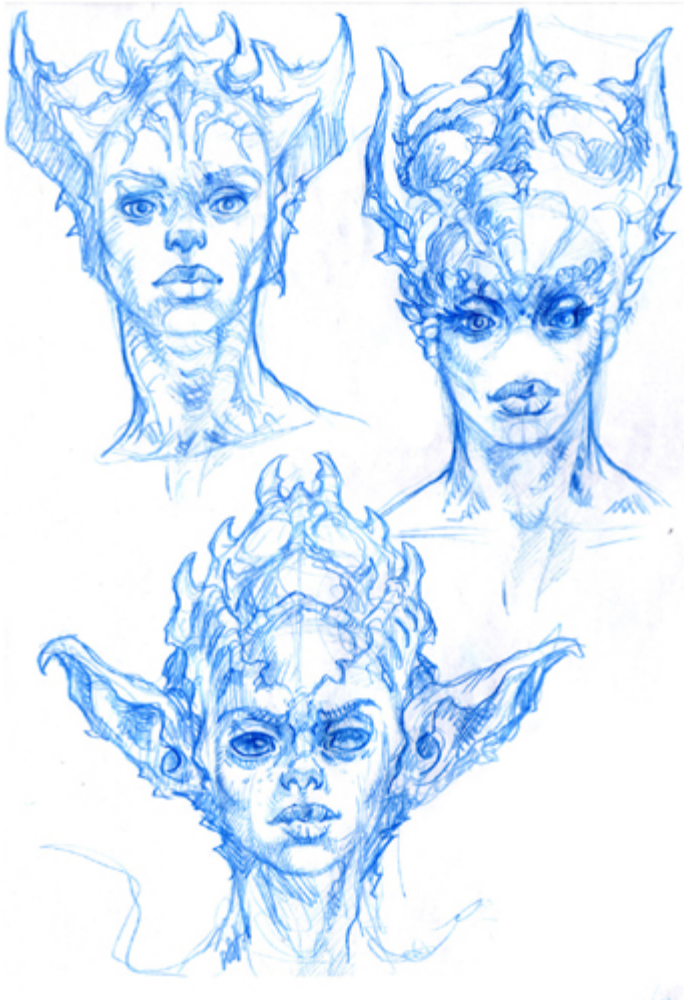


A few head studies, including a new template.

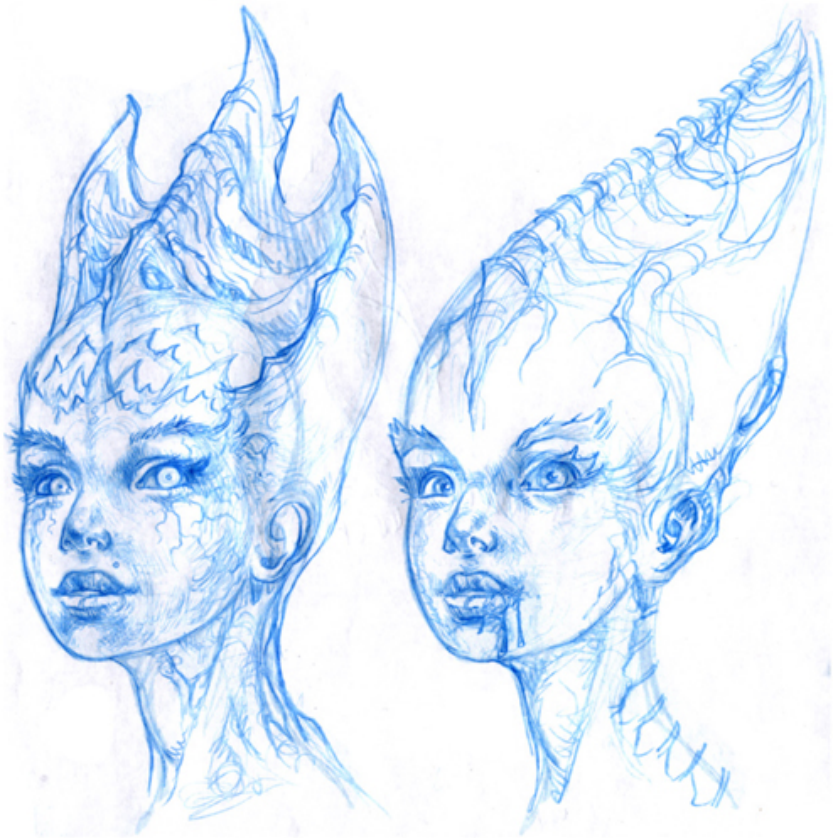
I tackled the problem by simply drawing human female body shapes,

then attaching the centipede section to the legs. This was immediately promising, so I played around with a few variations before focusing on what the head might look like. I'd already produced numerous head designs during my initial queen designs of course, but as this was a different kind of character, I reasoned a few more ideas would be a good thing. I produced a couple, then quite randomly found myself drawing a new featureless head, which I could use as a template for further ideas.

As I continued to produce head concepts, I very quickly established that the queen would have a very human face surrounded by growths with some kind of spiny crest or crown-like growth extending up from the top of the head. I varied the configuration of these growths, making some less symmetrical and adding overlapping elements in other areas. Regarding the faces, full lips and large eyes gave the face a commanding, seductive quality. I removed the nose from one sketch, but that looked a little too alien. Similarly, when I added enormous ears to another concept it made the drawing look a little too "high fantasy." This wasn't an elf, after all. Using the new template I developed a pair of drawings that featured quite girlish faces, whose seeming innocence jarred alarmingly next to the grotesquely extended cranial growths. The details of these crests were fairly muted after the extravagance of the previous versions, and normal human ears fused into the bony structure to reinforce the human aspect.



Various head studies.



Younger-looking faces with less elaborate crests.

I felt I'd probably produced enough head studies by this point, so I turned my hand to the task of finalizing the design for the entire body. As a starting point, I took one of my early sketches, which featured a very curvy physique. I liked the fact the legs appeared very human right down to the knees, at which point the lower legs morphed seamlessly into the insect section. Because one knee was pushed forward, it gave the impression that she might actually move her upper human legs as she "walked," which in turn would push and pull at the centipede section, causing it to deform and stretch. This seemed to invest that part of her with even more revulsion, which obviously is what I wanted in a character who was essentially an arthropod Medusa! I refined the inch-tall thumbnail, adding a staff for her to lean upon to add balance to the right side of the sketch. To create a centerpiece or focal point within the image, I added huge, curving antler-type growths coming from her shoulders, which framed

the head in an oval shape. I then decided to revisit a more elaborate, grand design for the head crest, with numerous curving horns and barbs, which served a dual purpose in that they resembled a crown as well as the jaws of a centipede.



New full-body thumbnails based on an earlier sketch.

Using this new thumbnail as a template, I began a new, much larger drawing. This part of the process involved adding much more detail and refining the forms and volumes that defined the different regions of her body. To support the massive antler-like growths coming out of her back, I extended bony exoskeletal armor over her shoulders and collarbone. I liked the contrast between this grisly, barbed aspect of her upper body and the softer curves of her midsection. Soft as her abdomen might seem next to the rest of her body, I still wanted it to have some texture and roughness. I achieved this by suggesting slightly protruding organic pipes and varying my pencil mark-making to create defined-looking abdominal muscles, which also seemed vaguely segmented. Wide hips further added to her humanly female character, and the illusion was maintained for a little while longer—until just below the knees. Here, her inner arthropod was allowed to assert itself, and her two legs morph into her dark half: the centipede! Quite how the rest of the ant-women creatures don't notice their queen looks like a centipede I have no idea, but then ant-women creatures are notoriously dim and easily fooled. The

sharper-eyed among you might notice there are two pairs of legs for each segment of her insect tail, which is in fact a trait more akin to a millipede. The reason for this slight deviation from my natural world reference is simple: artistic license! I felt the smaller, doubled-up leg clusters looked creepier and gave her a denser mat of feet upon which to scuttle. I added an evolved pair of horns to the end of the tail to complete this blue-penciled version, then scanned it into Photoshop. I modified the drawing, sketching a new tail, which curved up, and adjusting the skull staff. I printed a lighter-toned version, and using my Rotring mechanical HB pencil with a standard 2H pencil for shading, I produced the final art, resulting in an appropriately regal, if grotesque, creation. When I produced that first innocuous ant-woman sketch, I would never have thought it would lead me toward this piece of character design; and this, of course, is why drawing can be so much fun.



A more developed blue-line version of the queen.

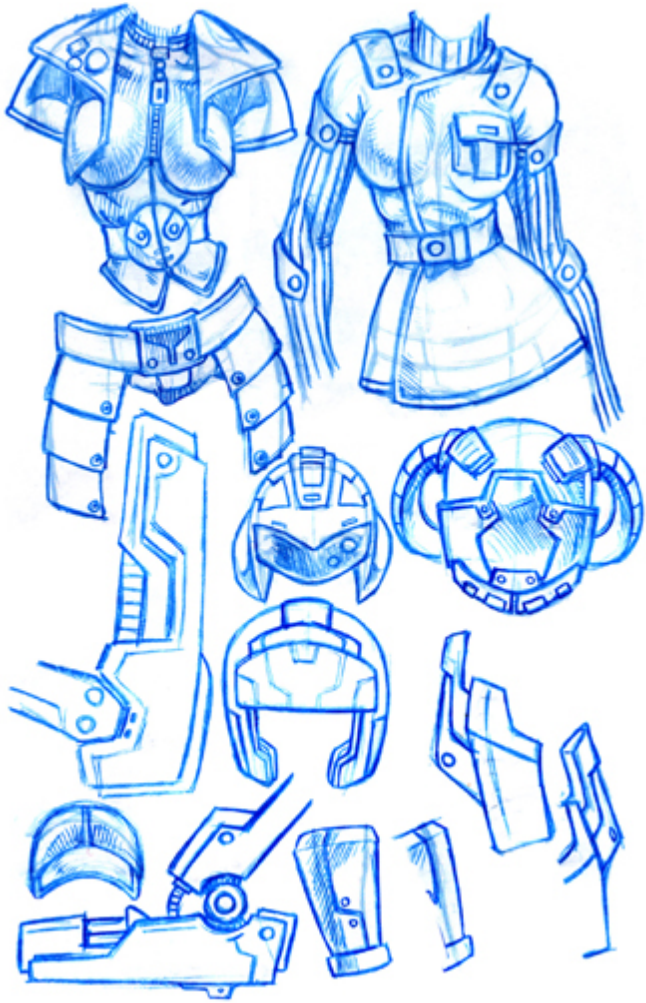


The final art, rendered with HB and 2H pencils.

Future-War Mecha Pilot

Let's imagine you've set yourself a brief to come up with an interesting character from a futuristic story where the planet is locked into a long-running global war. Immediately, you might get lots of ideas coming to mind, but they must always be placed into some kind of context: Who is this person? What is their backstory? Do they have a specific job, and if they do, how would that influence the way they dress? Would it possibly affect their physique or personality? And what about the war-torn world they inhabit—where do they fit into that environment? Are they a soldier or a pilot perhaps? Maybe they're a civilian struggling to get by in the rubble. Thinking about

such aspects helps to set a scene with which your character will have some kind of empathic resonance, and this will intrinsically influence the way they look, dress, and behave. This level of thought might not seem important when you're deciding whether or not to give your character a coat or boots rather than sandals, but it adds weight and conviction to such decisions, and will help you produce more rounded, convincing designs as a result.



A toolkit of clothing and uniform parts.

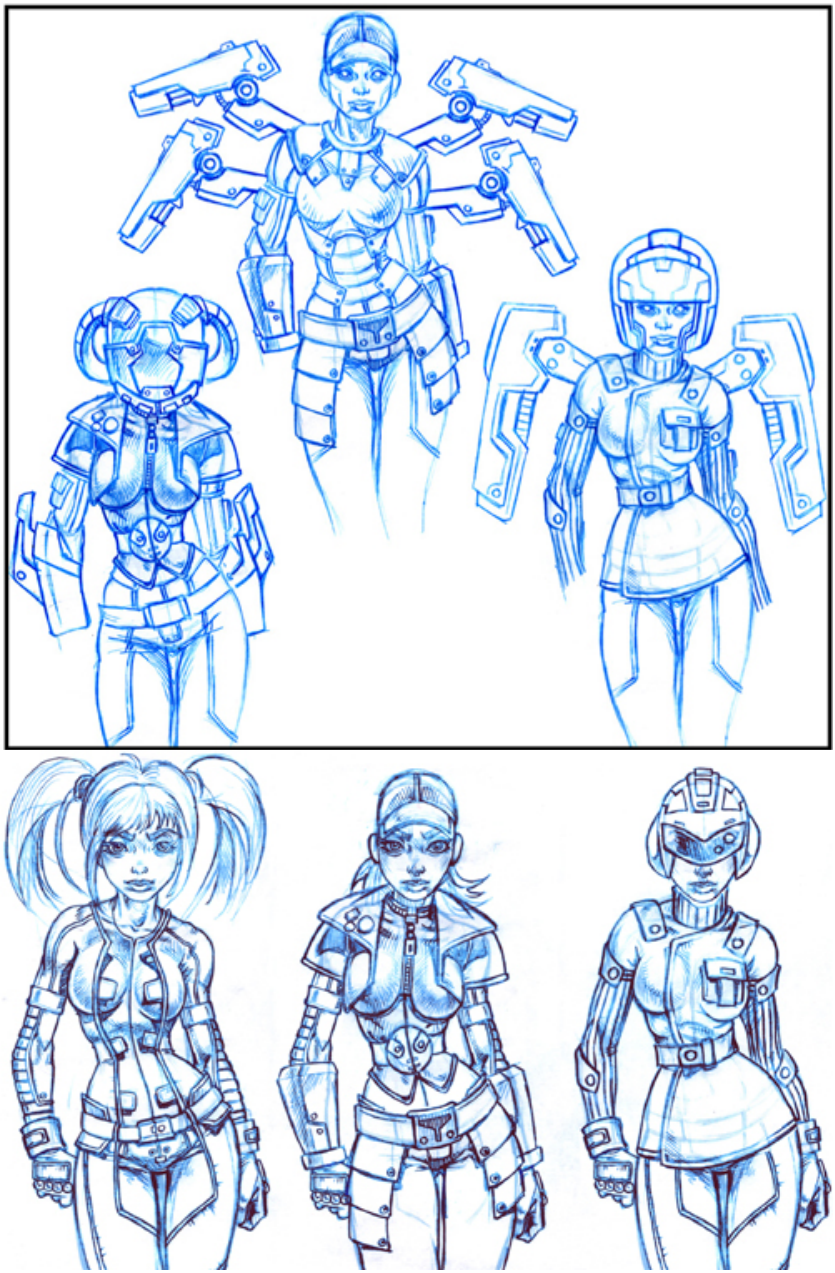


The initial character figure sketch.

Using the figure template from the “Breaking Anatomy” chapter (page 102), I produced a quick sketch of a pilot in a stripped-down flight suit, which I kept simple but tight fitting as if it were in fact an under-suit of some sort. I imagined she piloted giant walking mechas, which helped inform the look of her uniform. I then traced over this drawing to create a range of different jackets, attachments, and headwear. I scanned both the character sheet and the bits-and-pieces “tool kit” into Photoshop, then broke the images up, pasting each element into its own layer in a multi-layered document. Next, I copied the character sketch twice more to create three templates. The technique I then used is identical to the process that was at the

forefront of my first book, *Fantasy Clip Art* (which I once again advise you to procure!). It involves positioning a selection of different items of clothing over the base character template, then flattening the image and saving as a flat JEPG, TIFF, or other 2D image file. Depending on how many items and variables you've produced for your parts tool kit, the number of possible variations is potentially huge. When I use this technique, I tend to limit myself to between three and five variants, though, as getting too carried away on one concept can be potentially detrimental to a project. The three concept variants I've created here illustrate how easily numerous concepts can be generated in this way. I then chose to refine the character and created a new set of variations, this time with new, slightly more finished faces and heads and overall tighter rendering and line-work.

Variants of the initial sketch using the toolkit parts.



ABC Warrior: Joe Pineapples

As a child reading *2000 AD* in the 1980s, one of my favorite stories

was *ABC Warriors*, and of those Joe Pineapples was perhaps my favorite character of the bunch. He's also the character who has gone through the most design changes, and whenever I get asked to draw him, I have a hard time deciding which era to draw on for my version! This pencil sketch was one commission that was inspired by the Simon Bisley version, which featured a leather jacket stretched over an absurdly well-defined but very cool-looking physique. The client was happy with the sketch so I produced an inked version, refining the detail and design in the process.







This was another commission, but this time I went for a jacketless version inspired by later imaginings of the character and realized in my own way. Although the Bisley-style physicality is still present, I made it seem more battle worn and scruffy, and painted it using colored inks. The result was pleasing, but I felt the head was a bit too squashed into the neck, an issue I wanted to resolve one day.

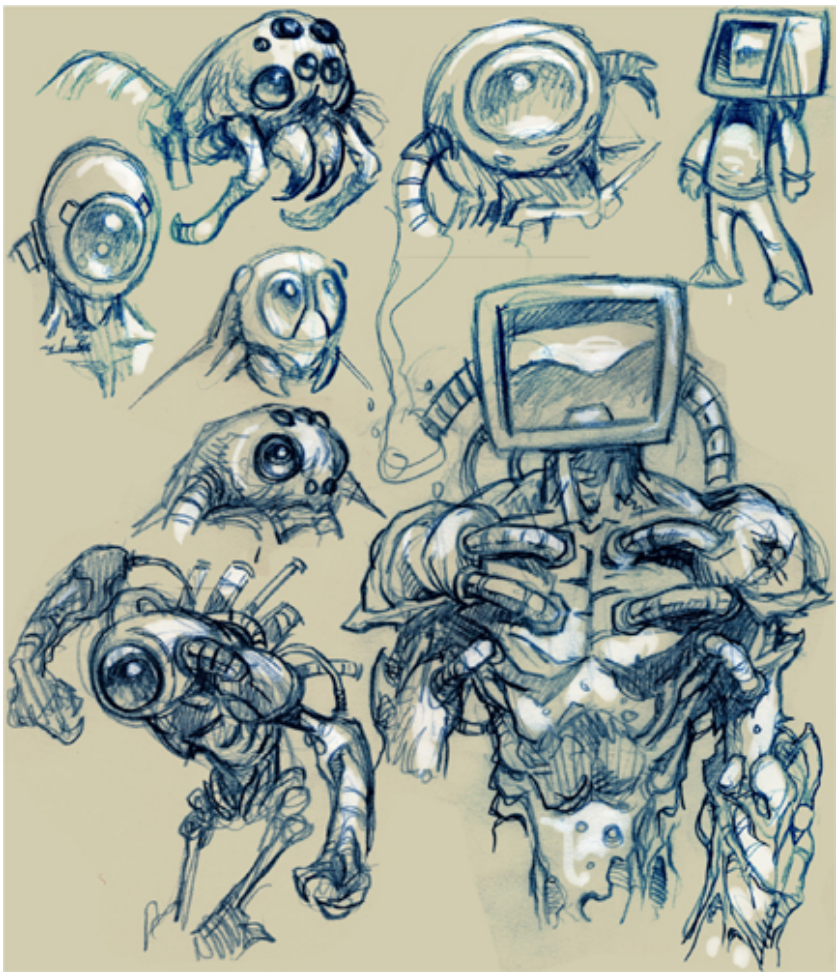


So I did! Using the previous painted version as reference, I produced a new base drawing of the character, extending the neck and adjusting the symmetry of the head. This time, I decided to give Joe a helmet inspired by Bryan Talbot's unique take on the character, whose helmet bore a scored grid pattern, similar to the classic "pineapple" grenade design. I added a jacket, and true to Joe's name included a couple of the aforementioned grenades, then rendered the whole design using my favorite blue Col-Erase pencil.

Screenface

This last example of refining a character design begins with yet another page of doodles from my sketchbook. I was watching a program about tarantulas on TV, which was very inspiring, not to

mention informative. (Did you know tarantulas are the most ancient order of spiders? Well, they are!) Almost without thinking I did a little sketch of the head, fangs, and eye cluster, which then snowballed. The sketching took on a life of its own, and before I knew what I was doing I'd produced a strange evolution of forms in which the eight eyes of the spider gradually reduced to a single screen-like organ set into the head of a humanoid creature. This became a TV screen. I still couldn't tell you why, but it intrigued me, so I went on to produce a more refined version of the character on Bristol board. This is an example of chasing an idea down the rabbit hole without the safety net of a brief from which to draw direction. It's terrific fun!



A page of strangeness from my sketchbook.



The refined character distilled from the sketches.

3D Sketches

During my time working as a computer game artist, I used 3ds Max and Maya to produce 3D models for use as in-game assets and later as a concept-design tool. Unfortunately, over the ten years since I began working as a predominantly 2D illustrator, I've not had the time to focus on 3D software, which is a shame as it's a great tool that can really help to put the flesh on the bones of a design. My old colleague Martyn Rotherham has kept a foot in the 3D realm, however, and uses it to great effect as these images show. I'll hand over to Martyn and let him explain his process.

"The 'beastie' models were created totally in ZBrush, without preparatory sketches or references. They were concept designs for a video game. The idea was to produce quick 3D models that did not borrow directly from anyone else's designs and that would explore how the creature might look when viewed from any angle. Each model took a little longer than a regular pencil sketch, but a single sketch only provides one view from one perspective. Once the models were sculpted, they could be quickly reviewed, and any changes the team required could very quickly be implemented by tweaking them to find the shape we thought might work. All of the 'beastie' models were sculpted in a single day."

In general, video games run smoother with lower polygon counts, because the more polys there are on display, the more work the processor has to do. However, the gaming public expects their games to look very detailed, which means lots of polys. So, how do character designers solve this dilemma? Well, it's no trouble when people like Martyn are on the case. The pirate woman model is a great example of making something appear extremely detailed, but is in fact quite a low poly model. Here's Martyn again to explain how he achieved it:

"The pirate woman was built as a number of low poly models in 3ds Max. Each section was exported as an .obj file then imported into ZBrush. Once they were all imported the poly count could be easily increased and details added, such as muscle form, wear and tear, and clothing folds. In total the model went from 15,000 polys in 3ds Max to over 18,500,000. Once the details were sculpted a normal map was created in ZBrush. This is essentially a way of faking detail by creating a 2D texture map that captures all the lighting information of the folds, dents, and bumps in a high polygon model. It's also known as a bump map. This was then exported and applied

back onto the low-poly 3ds Max model, giving it the appearance of being a very highly detailed model without the huge poly count. I maintain an ever-growing library of reference materials in both digital and printed form. So when I need to know what cues we all use to recognize a pirate I don't have to hunt them down! In this case, the hat, swords, boots, and guns were enough for me to begin the build. Again there were no sketches; I built her body first, around which I could place all that she needed to become the buccaneer I was looking for."

So, when designing characters for games, not only must you get to grips with all the appropriate details and facets of the character in question, it also helps to know a little about how they are to be implemented in the game. This sort of attention to detail might seem outside the remit of the character designer, but it will prove a very useful reference for other modelers and asset builders, and it's a fine example of how to tailor your skills to tackle a specific kind of brief.



A selection of ZBrush beasties by Martyn Rotherham.

This pirate was modeled in 3ds Max then imported into ZBrush.









The low polygon model is made to look highly detailed by applying a normal map.



Shaded comparisons of the low poly model and a normal mapped version.



The finished game character with textures added.

Case Study: Refining a 3D Concept in 2D

I was so inspired by Martyn's 3D models that I felt compelled to have a bit of fun with another of his "beasties." This creature, with its weird head stalks, just buried itself into my brain and it wouldn't get out until I'd imported it into Photoshop. This meant I could show another finishing technique commonly employed by character designers: painting over 3D character models.

When I started painting over Martyn's creation, I had absolutely no idea what I intended to do or how it would turn out. This is an example of putting aside my role as designer and allowing my artistic tendencies off the leash. To get things grounded I began by adding a flat beige color to the background, then painting a little dark shadow beneath the creature. Now that it looked like it was standing on something, I could feed off that feeling of weight as I began to work

over the creature, adding complementary colors at first. I used a standard brush with opacity set to about 50%, but I varied the mode, sometimes using normal, sometimes multiply. The lighting captured by the render had done a lot of work for me of course, but I refined it by deepening shadows and even remodeling some areas, particularly around the head. Although I wanted to retain the feel of Martyn's creature, I also had to listen to my own instincts, and as I worked into the different areas, it began to feel like a hybrid of Martyn's and my own design sensibilities. (This will happen often when you work as part of a team!)

I kept the painting quite loose and messy. The last thing I wanted to do was get bogged down in too much detailing. I darkened the underneath of the creature and painted a little green into the shadows there to suggest light being bounced up from the ground. Next I painted some red, ochre, and green over the creature using a combination of multiply and overlay brush modes, and finished it with a zing of bright light backlighting the creature from the left. After about an hour it seemed like I had completely obliterated Martyn's creation, but I need not have worried. His reply when I showed him what I'd done was, "Magnificent! And not at all how I saw it, which is absolutely a good thing! Fabulous work! You've made my day!" Phew, another happy client!



Another beastie by Martyn I've chosen to paint over in Photoshop.



The first stage of painting uses muted, complementary colors.



A little extra color is added.



The lighting and background ambience is enhanced to complete the piece.

Turnarounds & Lineups

The ultimate aim of character design is to provide a detailed design to a sculptor, 3D modeler, illustrator, or animator. The finished artwork should be self-explanatory, and include all the necessary design elements and information required for the characters to be built or drawn. Here, Jonny Duddle describes the process of creating a "turnaround," which is a series of illustrations of a character from front, back, and sides, which is a way of efficiently supplying everything that needs to be known about how a character looks.

"A turnaround is the best guide for building a character in three dimensions, whether in clay or CG. A turnaround should be drawn without any perspective, which would distort the proportions and affect the anatomy of the model.

"In this example, I'll show how to get a turnaround started. I'm drawing the character in a pose, holding a large wrench. This might be useful for a clay sculpt, for example, that can show the girl in character and give a sense of her anatomy and personality in three dimensions.

"Another approach would be to draw the girl in a more generic standing pose, with arms out at her sides. This would be more usual when passing the design to a CG modeler to use as an image plane in a 3D package, such as Maya."



1 **“This soldier girl started off as a sketch on a train. The original drawing is a bit scruffy and many shapes aren’t fully resolved. Her design is influenced by soviet tank crews of World War 2, and she has costume and equipment inspired by photographs that I found online. Before getting started on a turnaround, I make more sketches and start on a color version to get a better idea of how her clothing and equipment will fit together in the finished design.”**





2 **“For the color study, I desaturate the blue Col-Erase drawing and place the sketch against a toned background. I also drag in some of the more useful photo reference to use as a guide for color and design work. This means I don’t have to constantly switch to other software to view my reference.”**



3 “I begin by laying down some base colors. I start painting behind the sketch, which has its blend mode set to multiply. Multiply makes everything that is white in a layer transparent, while retaining the black lines and tone. On a new layer beneath the sketch, I use some dark, earthy colors, which will form a good base for the drab fabrics worn by Soviet military personnel.”



4 **“Next I create a new layer above the sketch layer and start painting with an opaque brush, with opacity set to ‘pen pressure.’ I continually refer to my photo reference for colors and detail.”**

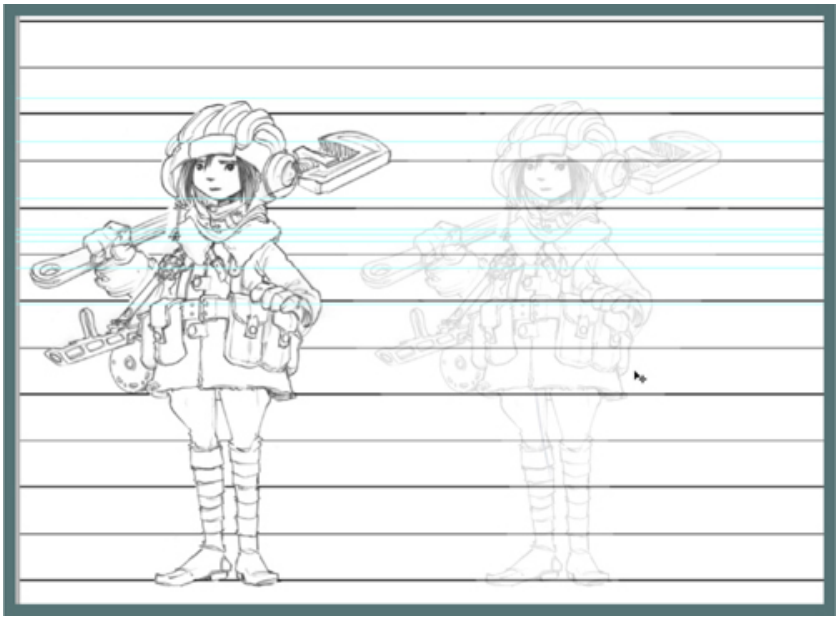


5 **“At this point, I start on my turnaround. The two pieces of work can inform each other as they are developed. I often find that working on a back or side view can throw up problems with the front view, so making a start on the turnaround will help make sure everything is going to work in three dimensions. The huge benefit of working digitally is that I can change anything at any point, because everything is layered. The original sketch is too rough for a turnaround so I begin a neater drawing using a blue Col-Erase**

pencil to work out the lines and shapes, then draw more carefully using a 2B pencil to get a black line. The channel palette in Photoshop allows me to remove the blue lines easily, leaving me with a clean line drawing to start my turnaround."



6 "I begin the turnaround sheet by creating a new tabloid (A3) file in Photoshop at 300 ppi. Most artwork will be printed out on standard-sized paper, so ensuring your digital art files are of sufficient size and resolution for printing is good practice. On my tabloid-sized document I create a series of 'height lines.' For normal sized characters I tend to work in feet so in this case I create six height lines, each with a six-inch subdivision. With rulers showing (View> Rulers), I drag guides at 8-inch (20mm) intervals, and once I have the seven guides (to represent six feet), I use the line tool (set to pixels on the tool bar) to draw the height lines. I then drag in my line art for the front view, and resize to get soldier girl to scale."

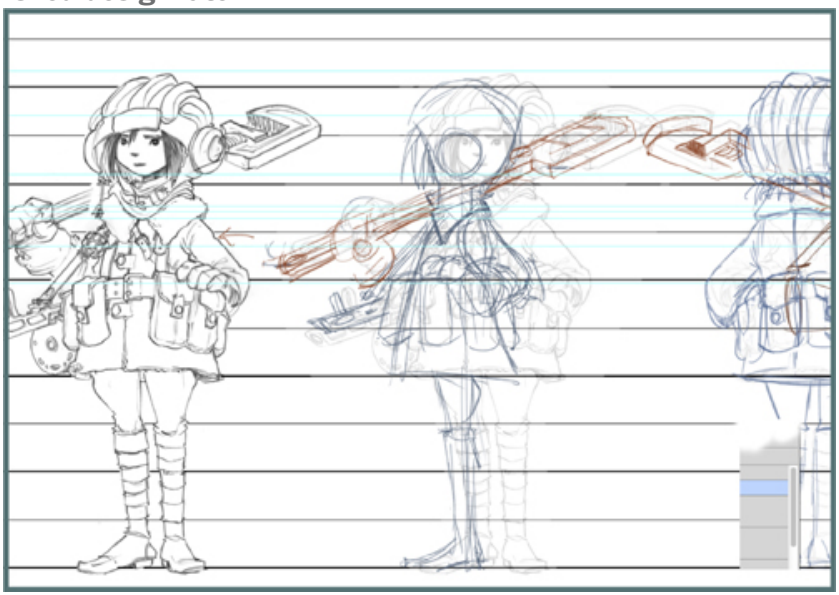


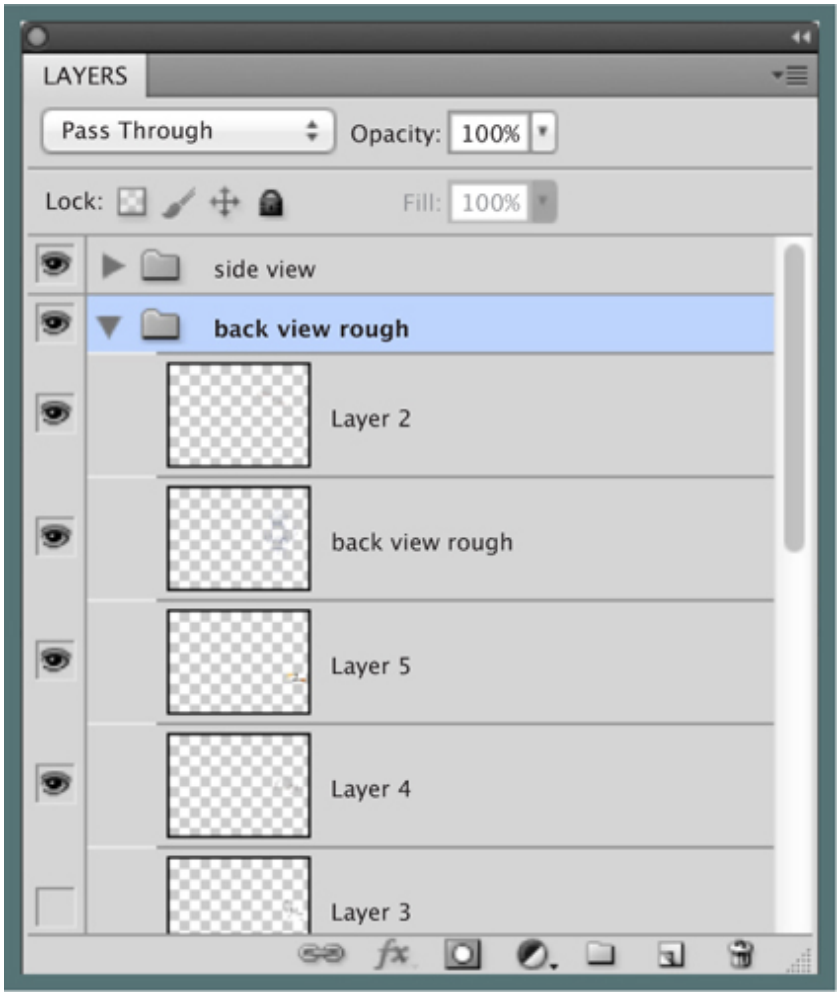
7 “With the drawing in place, I create a layer mask on the height lines layer and mask out the lines behind the girl by drawing in black with the layer mask selected. I then copy the layer by dragging, with the move tool, while holding down ‘shift’ and ‘alt.’ This creates a copy of the original drawing I can use as a template for my rear view. I lower its opacity so I can draw over it without getting confused about which lines are new.”



8 **“I flip the template because the rear view will obviously be a reverse of the front view. If a drawing doesn’t have any perspective on it and is drawn straight on, the silhouette of the rear will be the same as the silhouette of the front. This allows the original drawing to be used as a direct template and I begin by trying to work out the main shapes, and how they would appear from behind. As a concept artist, this is where you have to think in three dimensions. You must develop a clear idea of how the character is built, her**

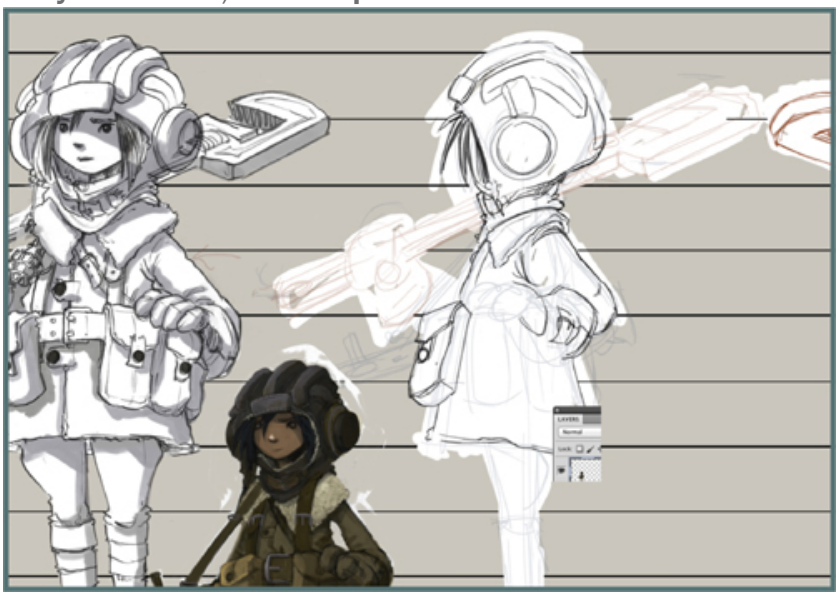
main volumes, and how they intersect and fit together. The most important thing to bear in mind is that if something curves one way on the front view (such as a collar, cuff, or coat edge), it will curve the other way in the reverse view. I work with a blue line for the same reason I use a blue Col-Erase on paper: I can use the colored line to work out the shapes and be quite untidy in the drawing while I get everything sorted in my head. I draw the wrench in a different color again on a new layer. This allows me to play around with its proportions in relation to the girl, avoiding any confusion that might arise while drawing them against each other. I can then work over these colors in black when I come to complete the finished design later."

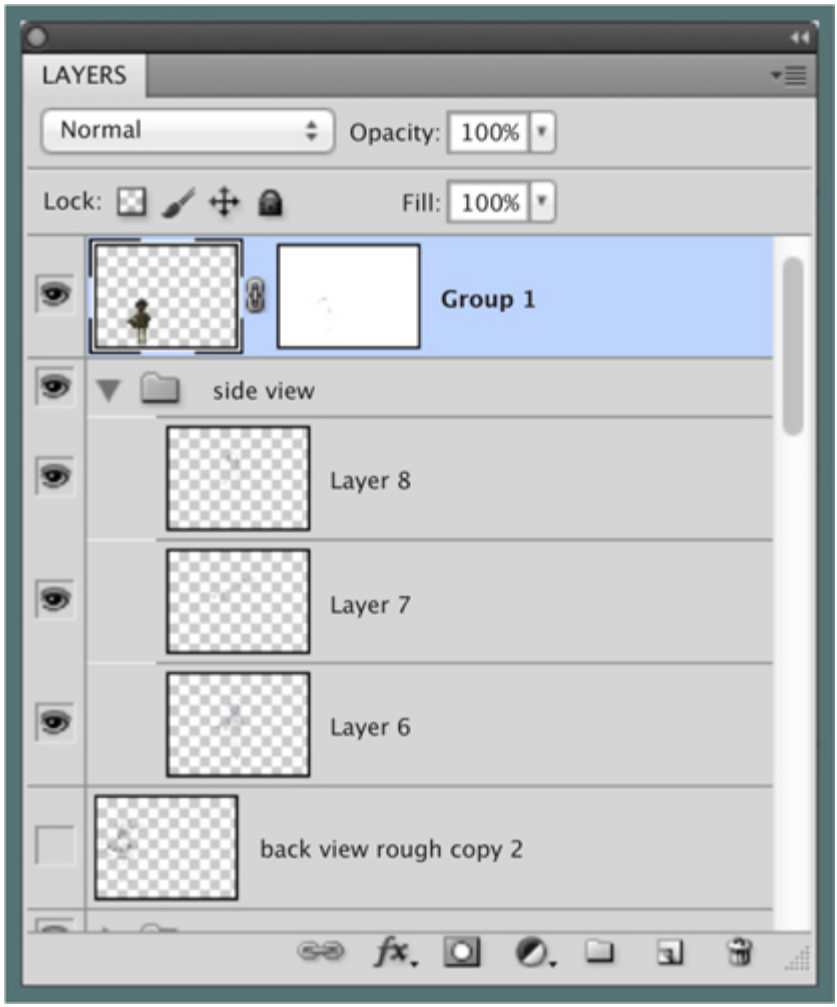




9 **"With a rough version of the back view drawn, I move onto the side view. Obviously, I can't use the silhouette here, and in many ways the side view is the most difficult to nail down. I can still use a template to line up some of the major elements in the design, such as the top of the head, the eyes, the waist, and the bottom of the coat, which makes it easier to establish these basic shapes from the side. The side view can make a huge difference to the volumes created by a character, and it's not always possible for**

a model maker to interpret the depth of a character from just the front and back views. It's less of an issue with a character like this, but it can become ambiguous with quadrupeds, robots, or fantasy characters, for example."





10

"With the back and side views roughed out in colored line, I use the Marquee tool to select all the space behind the height lines and fill with a neutral ochre tone. I often do this in gray or earth tones because it helps bring out the silhouette and is a very quick way to add something extra to the presentation of the design. I also paint in some simple shadows on the front view to help me understand the form and volumes of the character. While working, I bring in additional reference, including the work-in-

progress of the color study. I drop the opacity of the side and back sketches, and am free to continue with making a neater line drawing.

"This is how to get started on a turnaround, and as you can see, the process is quite involved, requiring a lot of thoughtful consideration of where and how you build the different shapes and volumes that define the character form. As with any discipline though, once you get a process in place your ability to acquit yourself in any given task becomes that much easier."

Basic Lineups

Whether for a game, film, theater production, book, or comic, the way in which different character designs relate to each other can be vital to the story. Size, shape, and volume are hugely important, and from the early stages of development, characters are often put against each other to ensure these relationships work.

Working digitally makes this a straightforward exercise. Characters can be lined up, against a scale, and these relationships can be checked, discussed, and adjusted. Sketches can be scanned from the very early stages of the design process and the size relationships monitored throughout development as the designs progress.



This lineup for a sci-fi book places all of Jonny Duddle's characters from the book together. Produced in the early stages of the book's development, it provides useful reference to ensure characters are drawn to the correct scale throughout the book.

Presentation

The old adage that a piece of art is never finished but only abandoned has never been truer than when applied to digital art! While it can be tricky to know when to leave a drawing alone and call it done, a digital approach literally never exhausts the number of changes and effects that can be applied to an image. Knowing when a character concept is finished is a particular skill in itself, but it can be rewarding to indulge in a few finishing touches, even if just to experiment with a few new techniques or tricks. If you have a character sketch you'd like to develop further, the next step is to produce a more finished version of the drawing to explore design aspects and lock down the elements that will eventually define the character. As ever, there are a number of approaches to achieving this, and which one you choose depends on personal preference of working methods and what you plan to do following the finished drawing.



The medical officer design began as a well-developed character template.



The details of the uniform are sketched in.

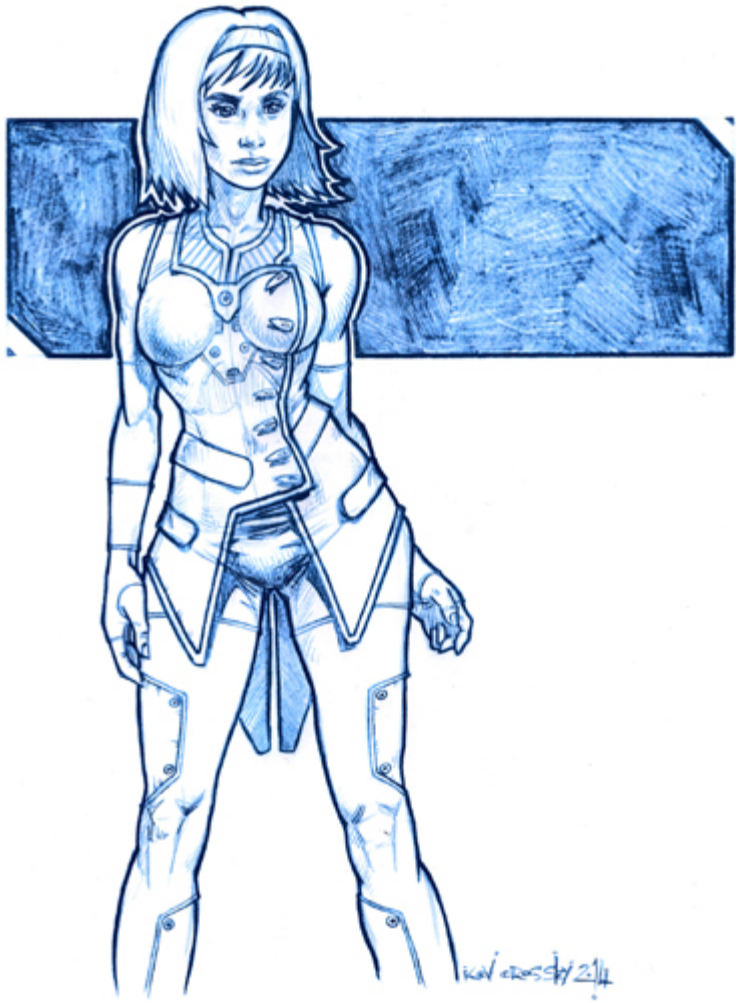
Medical Officer

This sketch began as an idea for a new figure template, but, as can often be the case, while sketching I got carried away and ended up with a really well-developed character template. The hair and feature set have been tightly rendered and defined, and her physique is well formed too. I decided to use this drawing as the starting point for a medical officer concept design. A tunic of some kind seemed like the most fitting option for such a profession. I gave the garment an asymmetrical design, with fastenings off to one side. Instead of buttons, studs, or Velcro, I was instead inspired by my son's winter coat to add toggles, which gave the tunic a striking look.

I wanted the character to look as if she worked in a slightly futuristic environment, so I added slightly odd-looking embellishments, straps, and other untypical features, which helped pull the concept out of the present. Variations in fabric texture and the overlapping sections and shapes gave the impression the uniform was composed of multiple layers. At this stage, the rough drawing was complete—the character and her attire decided. Although a design to this standard is common enough to communicate an idea or concept, there are a few simple techniques you can use to add an extra dimension of finish to a drawing. It should be noted that the tighter the rendering is on the initial image—like my example here—the better the finished concept will look, but these tips will add an extra dash of quality to (almost) anything.

The first technique is so basic you'll wonder why you never thought of it before, if indeed you haven't already. I had been drawing and designing characters for twenty years before I picked this trick up. Quite simply, you use a blunted pencil to thicken the line around the character. How I managed to avoid this idea for so long I have no idea, but once I began using it my characters looked markedly better.

The second simple trick involves framing your character in some way. You can achieve this by creating a black-line border of the sort I've used frequently throughout this book, you can drop a shape behind or around the character, or you can use such a shape to frame part of the body or design. I use circles quite often, usually around the head and shoulders. A circle is an incredibly powerful shape that draws the eye and creates an instant center in an image. Try it and see! Again, you'll find examples throughout this book. For my medical officer I've used a rectangle with diagonally cropped opposing corners, with a gap at the point it would meet the character.



The final pencil is refined by thickening the lines and adding a background graphic.

To add further polish to a character concept, a little color works wonders, so I opened the image again in Photoshop, then desaturated the drawing to remove the blue color. I was left with a grayscale version, and above this, I created a new layer with the blending mode set to Multiply. Into this layer, I used the Lasso tool to create a selection that followed the contours of the character, then filled the finished selection area with 50% flat gray. I then used the Lasso tool once again to select different areas of the gray color area by area, changing the tone of each section of the character until I had created a grayscale tone study. Next, I used the Wand tool with

tolerance set to 0 to select an area of gray tone, then used the sliders in the Color Balance dialog box to add hue. I repeated this process for each gray tone, resulting in a fully colored and tonally balanced image. Because this color layer was set to Multiply, the pencil remains visible through the hue and none of the line detail is lost. To finish, I added a little texture by applying the Noise Filter, then added shading by painting black color into a new Multiply layer set to 20% opacity. Similarly, lighter tone was created with white added into an Overlay layer. This approach can be a very efficient and fast way to deliver a colored concept, and can even be used to create quick color studies for future, more detailed paintings.



Before color is added, the character is tinted with flat, neutral gray.



The gray is broken up into different tones.

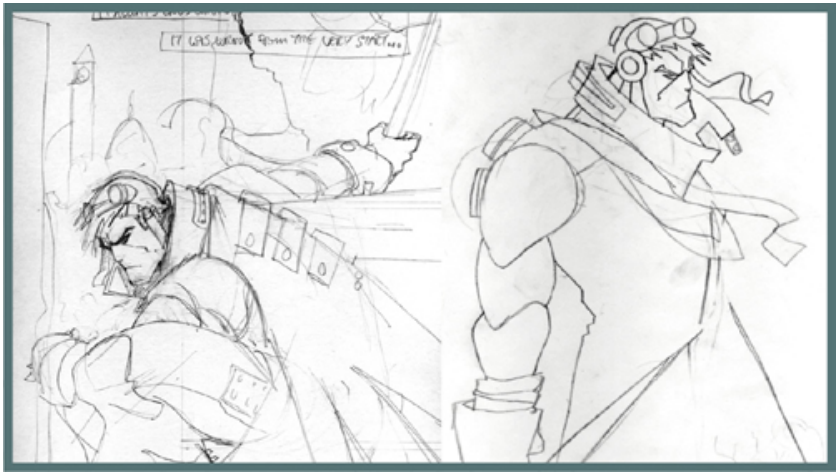


Flat color is added.

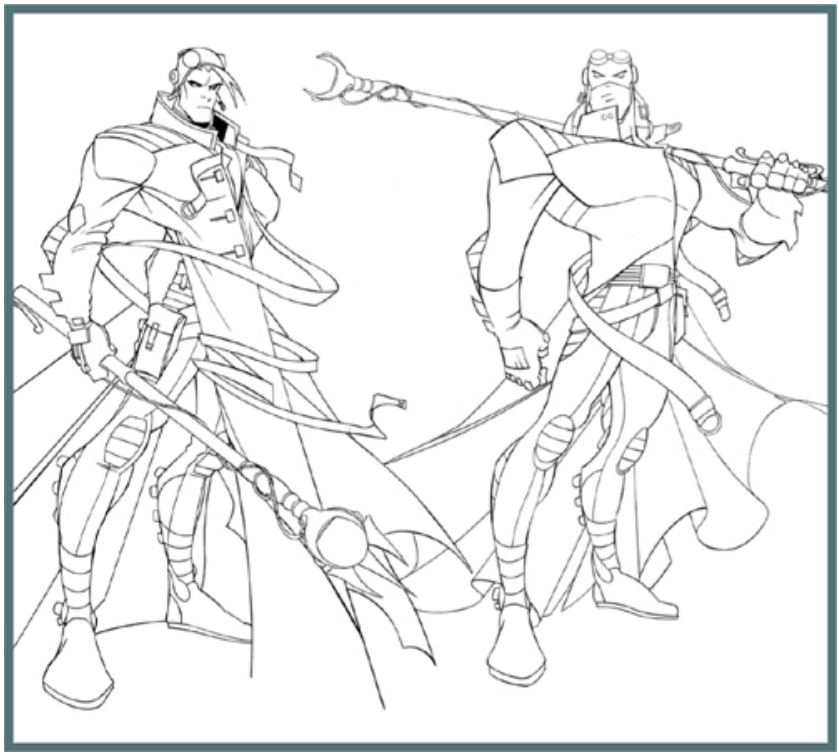


Basic shading completes the presentation.

Sunset, by Paul Green



1 **Sometimes the best way to really sell a character is to present them in a well-polished image that puts them into some kind of context. This could relate to their function, job, or place within the world that they inhabit. It also provides the character designer with a good reason to stretch their artistic legs a little and produce a stunning piece of design that also serves as an eye-popping piece of artwork. This image by Paul Green is a superb example of this.**



2 **Paul began by coming up with a design for his central character. His first pencil sketches were very quick and loose as he explored shapes and proportions for the character. These provided the basis for producing a couple of full-body studies, which he finished with clean inked line-work. Although each one was built from the same base template, they were quite different to one another while sharing certain similarities, such as the cloak, goggles, staff, and flowing belts or straps. This version of the character featured a stylized physique with very broad shoulders and elongated limb proportions (stylistic decisions discussed in the "Breaking Anatomy" chapter, here). These features created a dynamic, heroic feel for the character.**



3 To get a better feel for the character, Paul then produced a finished ink drawing in an action pose on top of a stone lion. This further bolstered the nature of the character as a super hero or vigilante of some kind, and illustrated the visual flair the flowing cloak and other costume elements brought to the character. Doing an illustration that shows the character like this also allows the designer to get a better feel for their subject. The shapes and forms can be explored in configurations not possible in a basic

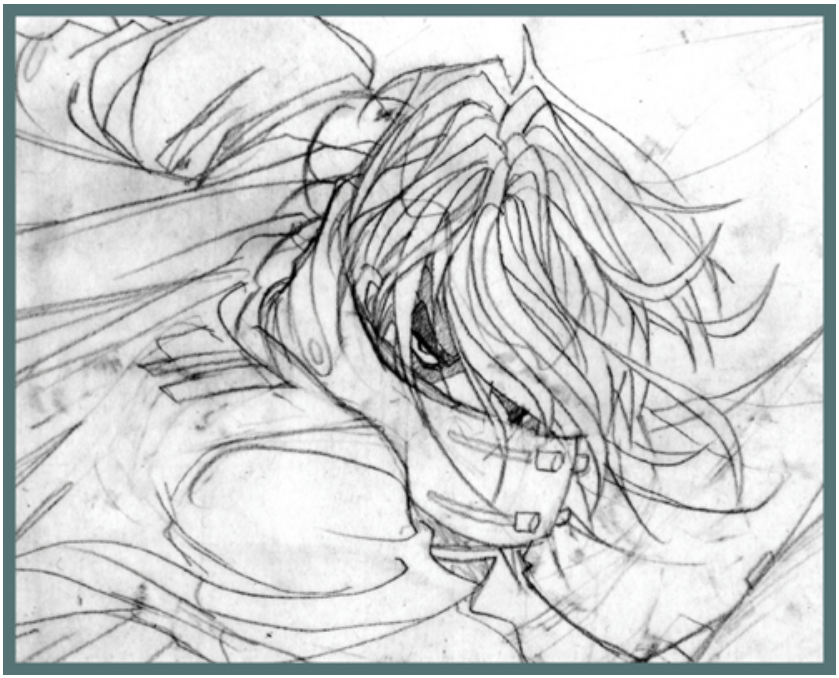
standing pose, and this in turn can inform further iterations of the design.



4 So, Paul went back to the drawing board and broke out the pencils once more to begin a new version of the character. This time, the extreme comic proportions of the original were toned down to produce something that looked a little more realistic. This version of the character focused on the costume as Paul began to refine the volumes and shapes, adding more pouches to the belt

and arm and leg sections of the costume. The overall feel is one of asymmetry, with mismatched features creating an interesting contrast between the left and right sides of the character. In this version, however, the head has yet to be resolved.





5 Next, Paul produced a number of head studies. It might seem obvious to say, but close-up portraits like this allow the designer to focus on the features of the head without being distracted by the larger image. The hair was given animated definition and shape; now it frames the slim face. The expression here is important too, as the feature set of the face can inform how the character might hold himself.





6 For the next head studies, once again, standard front-on portraits were eschewed in favor of profile studies: one looking up, and the other looking down. Not only do these images look much more refined than the previous drawings, they also offer some insight into the physical interaction between the character and his clothing. It is this sort of knowledge that is useful when the artist comes to develop the concept further. Also, the art style has evolved in all areas: the face in profile is sharper and more

intensely set, the hair has much more dynamic potential, and the clothing has also undergone a further rework.



7 Once Paul created a feel for the character, he then produced a partial-action portrait in ink to explore how the volumes and tones might work in the final version. The attire of the character was also further modified with definitive shapes adding a solidity and visual refinement to the whole. The face echoes the previous sketches, but is emboldened with an expressive edge that exudes confident intent. Also, it looks cool!

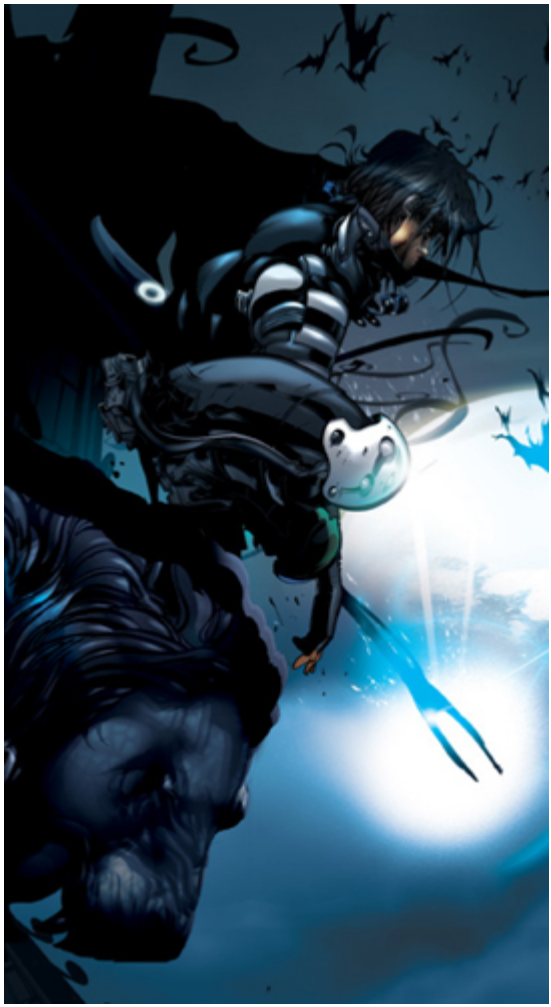




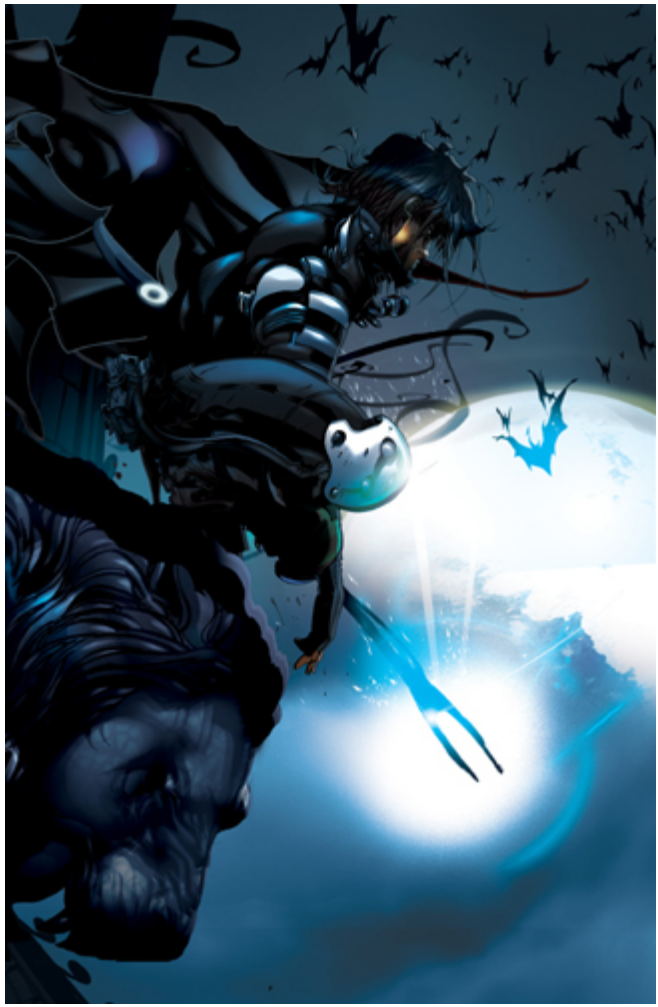
8 Following hot on the heels of these head studies, the next step was the creation of a new image featuring the whole character. Paul borrowed elements from many of the preliminary sketches, bringing them together to create a composition full of drama and atmosphere. The stone lion head was reintroduced, as were the cloak and staff from the first full-body designs. Then the drawing was completed by the addition of a circular background device (remember what I said about the strong visual presence of

circles?) and bats. Lots of bats. Paul then began the process of adding color to the image by first filling the background with muted tones to create the impression of night. The naked sky at the top of the image is gray, while blues were added into the bottom to suggest low cloud partially obscuring the moon, which has replaced the circle. These color planes were created using flat tones mixed with imported textures and enhanced with filter effects and hand-painted touches.





9 These images show how Paul progressed the rendering of the image. The staff was made to glow, and the lion head was colored with textured tones and effect overlays. The character was first block-colored with flat blue before each area of his outfit was broken up into different hues and volumes, adding definition and contrast.



10 A little back-lighting on the character added a finishing touch, and definition within the dark area of the cloak was achieved by use of simple line overlays and shaded blocks of lighter color.

3
PROJECTS

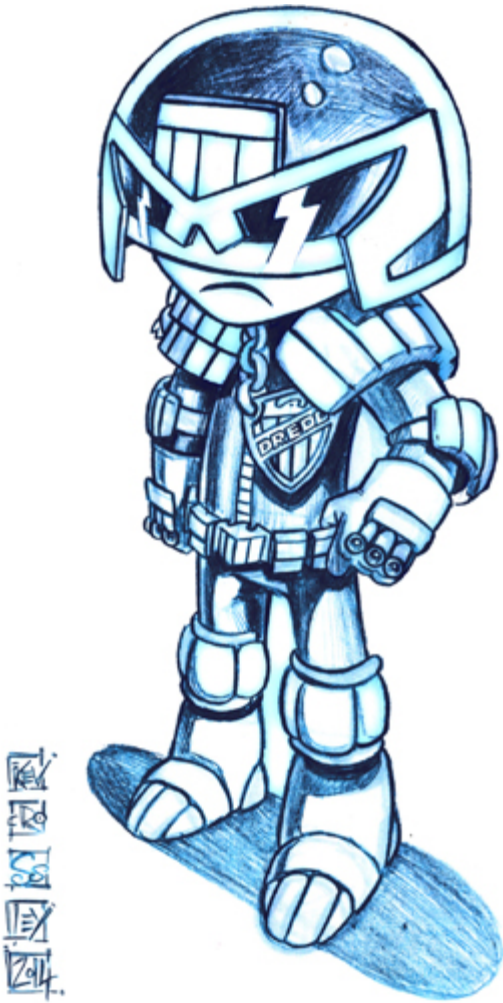


Case Studies

In this section I wanted to present a mixed selection of character design projects to offer glimpses into what might inspire a character, and how it then develops. In the case of the *2000 AD* characters, it seemed redundant to simply present versions of the characters that have been seen many times already, so I set myself the challenge of redesigning each one in such a way that they were radically or at least subtly unlike any variation that might have existed before.

For example, while I was studying manga styles during preparation for this book, I thought it might be fun to see what Judge Dredd might look like if drawn as a chibi character. So, I quickly thumbnailed an inch-tall sketch, which I scanned, turned light blue, then printed much larger onto art board. I then worked over the top of this with a blue pencil to produce the version of Dredd you see here. In true chibi style I did try to make him look happy, but all such attempts ended in failure, and as you can see I don't think the Judge approved of being drawn in such a style. (I guess it must be difficult to lay down the law when you look so super-deformed and cute.) So, failed experiment or valid exploration outside the established norm? I'll let you be the judge. (Personally, I think it rocks!)

Some of these case studies are quick studies and some are far more advanced, with the scope and content of each varying tremendously, but all have certain aspects in common, namely progressive evolution of creative expression. Well, that and a great deal of fun! Most useful for you the reader is the fact that there is no one way of going about the task of character creation. Even though I have developed my own methodology and approaches to specific design jobs as described throughout this book, I still find myself making things up as I go on occasion. These can be the most rewarding ways of working, and sometimes I might discover a new way of achieving a solution to a problem, which I can then incorporate into my standard working procedure. It is this progressive personal journey that ensures design never gets boring or tedious, and I hope this comes across in the pages that follow.



Chibi Dredd!



Judges Dredd and Death.

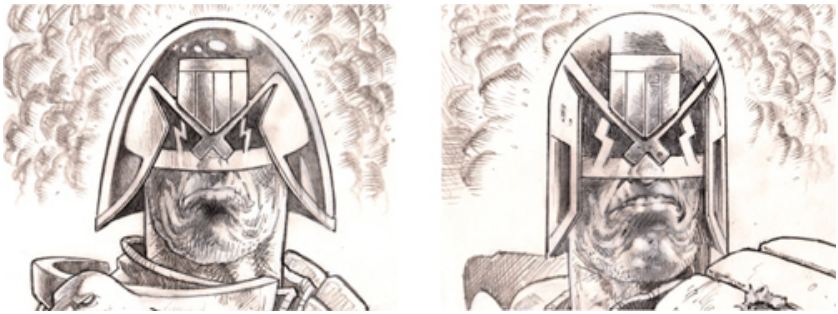
Dystopian Future: Judge Dredd

One of the first characters that came to mind when I began thinking about what to include in this book was Judge Dredd. The character was created in 1977, and since then the uniform he wears has undergone several changes, some quite dramatic. One of the character's great aspects over the years is how much freedom artists have been given to draw him however they like, within reason, and this has resulted in a startling range of variations in the uniform from week to week.

Perhaps for this reason I very rarely tried my hand at drawing the character—there were simply too many ways to interpret him, and I could never make my mind up about which direction to go in. This had to change when, a few years ago, I began to get lots of requests to paint and draw Judge Dredd, so I had to decide how I was going to do it. What was my take on him going to be? One of my first attempts culminated in an acrylic painting that leaned heavily toward the Simon Bisley school of anatomy. It was a fairly standard rendering of Dredd, but I would experiment with many other variations as I became more comfortable drawing him. While researching the costume changes I rediscovered the magnificent work of Brendan McCarthy and Mike McMahon, who had their own unique take on the character. This inspired me to produce a few portrait sketches in which I tried out different helmet styles, which was fun, although it did cement my preference on the "bucket" helmet rather than the "dish." When the Karl Urban–starring *Dredd* movie came out, I was very impressed with the radical yet astonishingly faithful costume redesign, and this inspired me to think about what I could do to redesign the character myself. I was tempted to revisit a painting I did of Dredd as a werewolf, for no other reason than it would give me an excuse to draw another cool monster, but as this wouldn't really be anything new I had to take a different route. Instead I chose to redesign the Dredd uniform in such a way that the classic comic silhouette would remain recognizably Dreddish.



Judge Dredd as he currently looks.



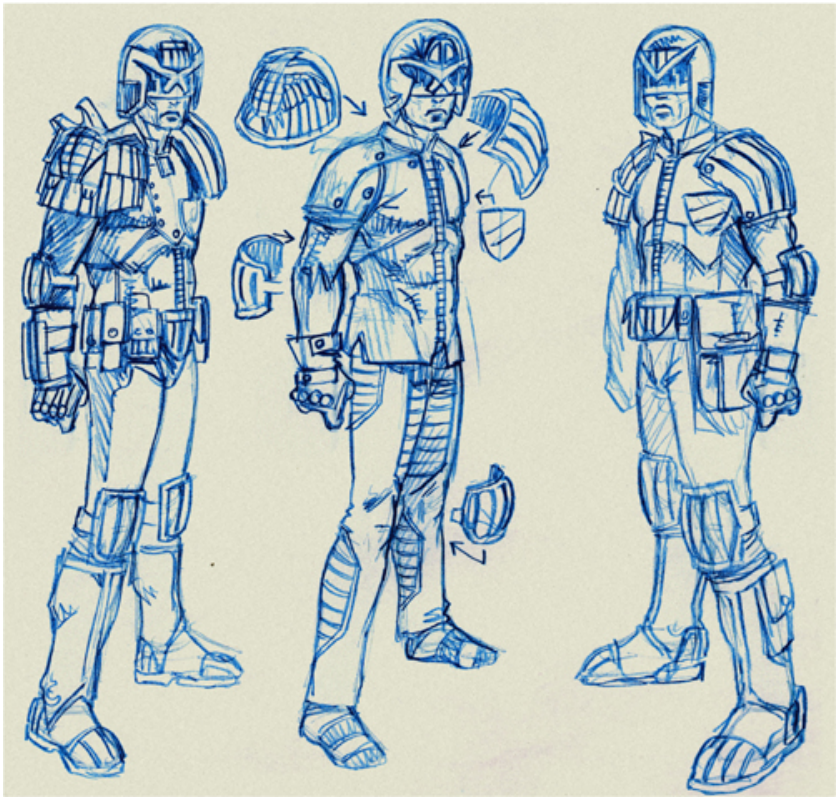
Dredd's helmet can vary quite a lot!



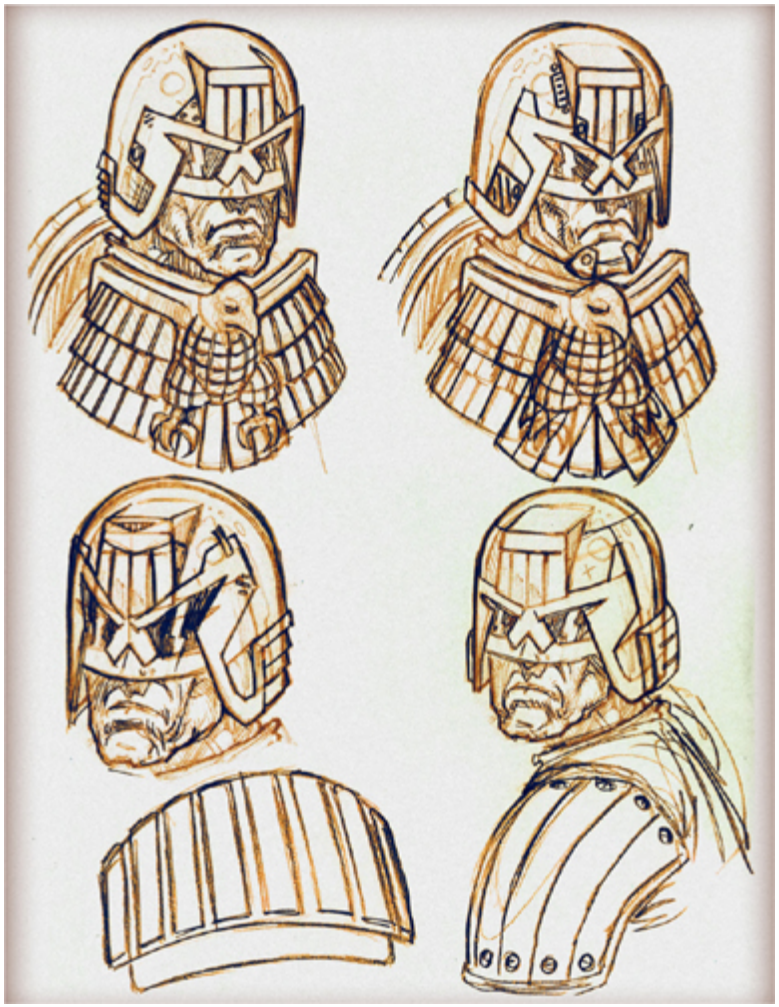
Dredd as a werewolf! AROOOO!

A New Uniform Design

So what better way to begin than by using a template? I printed three blue-line templates and started to sketch out some uniform variants. In the first instance, Dredd's costume was essentially a motorbike jacket and pants with small protection pads on the knees, elbows, and shoulders. Some biker jackets have "quilted" patterning over some areas, which offers greater cushioning but also helps to break up the monotony of flat leather, so I made a note to incorporate such textures in a later, more detailed drawing.



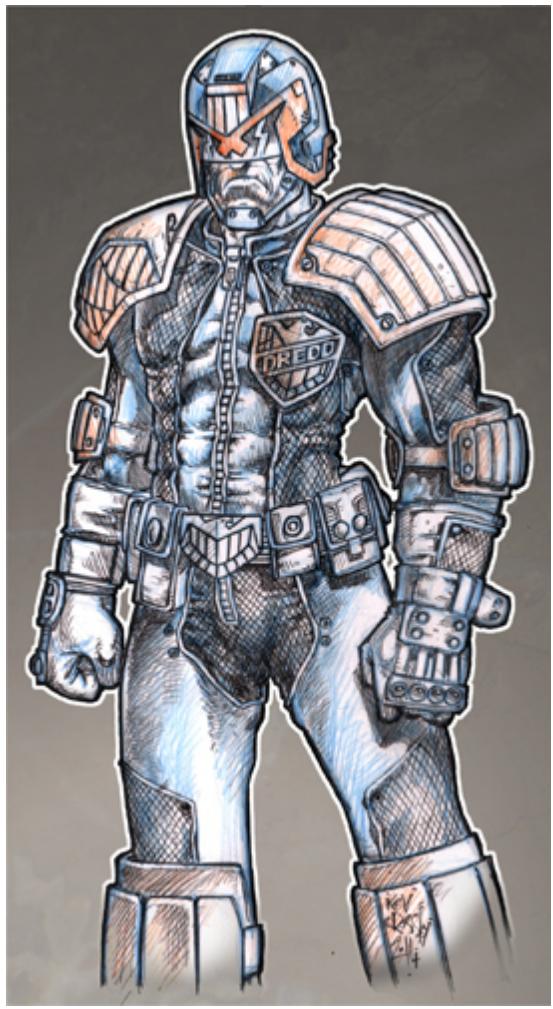
Template variations of a new Dredd uniform.



Close-up studies of Dredd's head.

Although the movie version featured actual body armor built into the Judge uniform, I wanted to keep my version fairly traditional, so instead I broke up the jacket into layered sections. My rationale was inspired by the idea that the uniform could in essence be taken apart, with sections easily replaced or exchanged, including the incorporation of different shoulder pads or even more substantial armor. With regards to the helmet, I changed the design a little bit in these full body sketches, even reverting back to a shape more redolent of the very first design from 1977, but the thumbnails were too small to really show much detail at this stage. So, I printed a few head templates and made a set of helmet studies in which I could

really explore some new configurations. With elements from these various sketches, I set about producing a new finished Dredd design, rendered over a template based upon my acrylic painting. At a glance this looks rather similar to the established Judge Dredd design, but upon closer inspection there are many subtle differences, including textured materials, stylized shoulder pads, and, of course, the helmet.

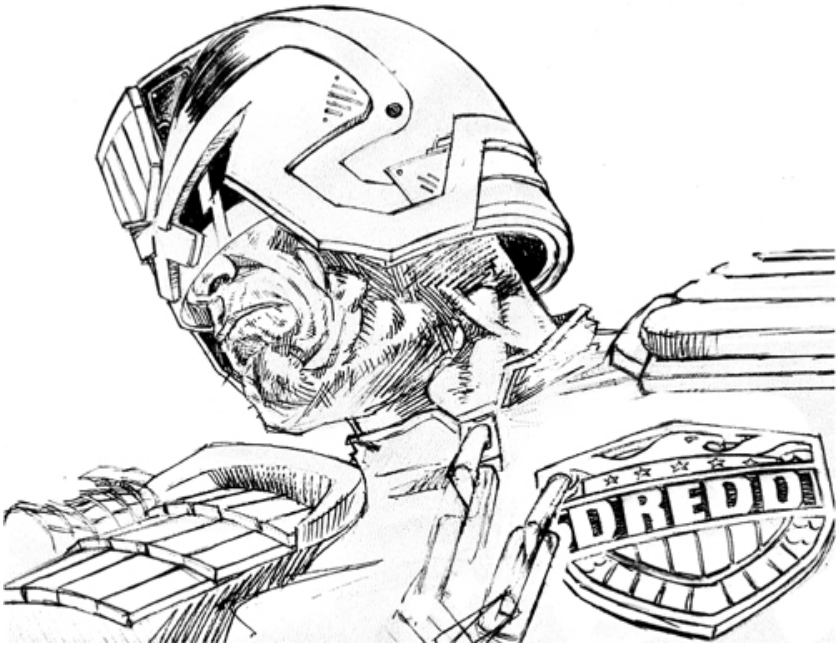


The final new version.

New Bust

One of my favorite Dredd artists, Greg Staples, had himself photographed as Dredd, and one of the resulting shots impressed me so much I just had to do something with it. It was a portrait

focused on the head and shoulders from a dynamic angle, which had so much drama and attitude I knew it would make a terrific starting point for a new design. Using the photograph as reference I produced a pencil sketch that featured my new helmet design. After scanning into Photoshop I turned this sketch yellow and printed it onto Bristol board, whereupon I began to develop the drawing using an orange Col-erase pencil. I decided to keep the more standard shoulder pads for this image, as they seemed to work better at this angle. For the uniform I carefully worked out where my new "layered" facets of the jacket would sit at such an angle, and reinforced their feel with crimped edges and cornering rivets. The trickiest part of these elements was figuring out how to build the minutely quilted texture of the leather. I etched in diagonal grids of lines, bending and deforming the grid over imagined folds. When these grids were settled, the hard part was out of the way, but the long part was just beginning! Using an HB pencil I strengthened the lines and added shading to enhance the three dimensionality of the material. The fact that not all sections of the jacket were textured created an extra dimension of variation, and to finish I included a stitched strap extending from beneath the eagle shoulder pad. Finishing was achieved using 2H and HB pencils, and the result was very satisfying. Although the image as it stood was perfect as it was, I thought I would add a little color digitally, just to see how it looked.



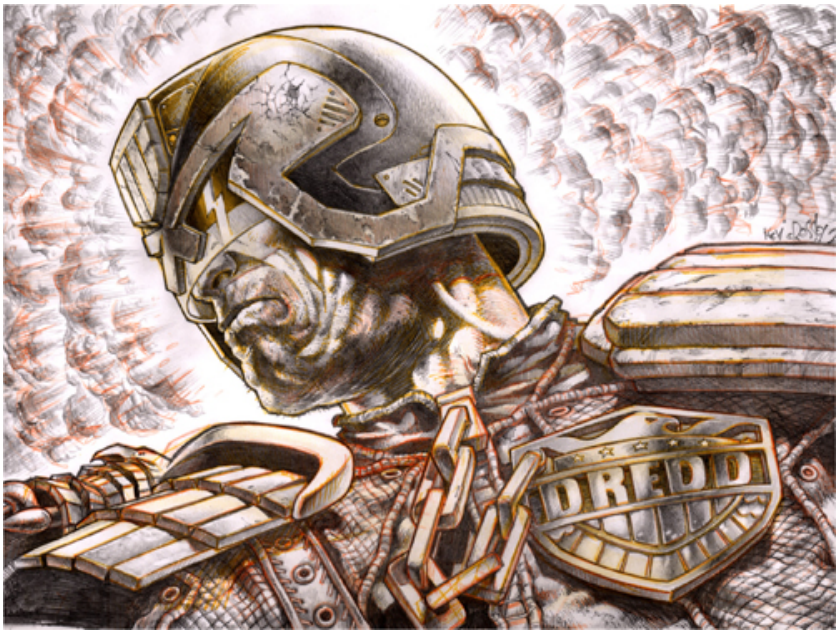
The completed pencil art.

Some stages during the coloring process.









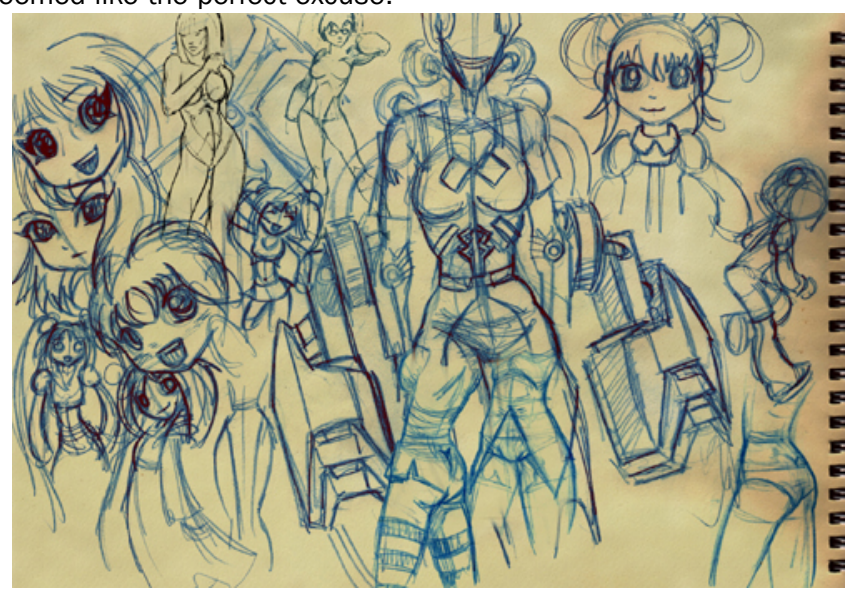
This sketch was based on my photo reference.



The final version, that's been digitally colored.

Manga: Post-Apocalyptic Robot Girl

Manga is not a subject I have much first-hand experience working with. In fact, during the past thirty years I have only ever drawn three manga characters: two were sketch requests at comic conventions; the other is earlier in this book. (See if you can find it.) So it wasn't at the top of my list of styles to include in this book. However, some anime and manga can be very cool indeed, and I have always had admiration for the amount of movement and energy manga artists can get into a static, 2D image, usually by clever manipulation of clothing, hair, smoke trails, and other elements. It seemed to me this feature of manga was analogous with the anarchic "movement lines" in the British comics I grew up with, such as *The Beano* and *Whizzer & Chips*. This was something I've always identified with, so I thought I should at least try doing a manga character, and this book seemed like the perfect excuse!

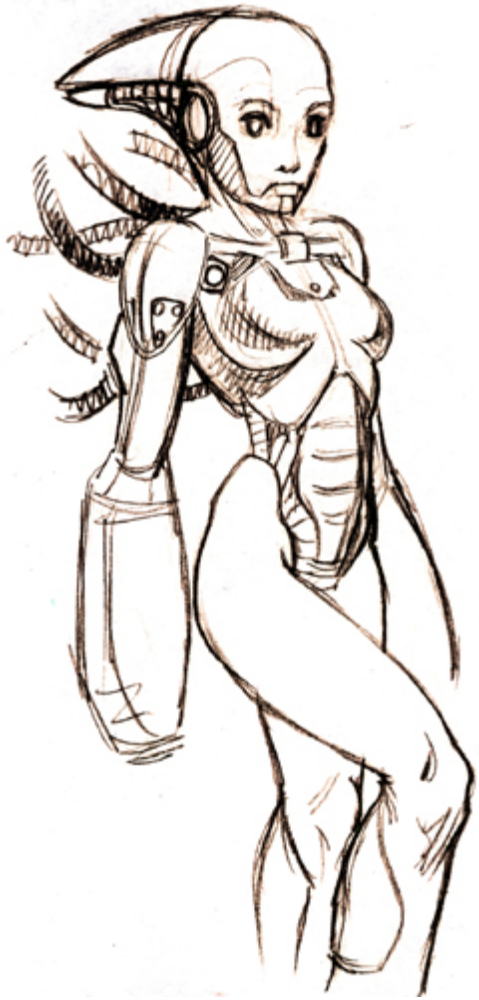


A page of manga-inspired sketching.

To prepare for this case study I spent a good while filling pages with manga sketches, using various DVDs, comics, toys, and models as reference. It quickly became clear that there are many ways of drawing manga, so I had to decide which style I would choose for my robot girl character. I'd already had some fun with the super-deformed chibi style, but I knew I didn't want to ape the "big eye" aspect of some manga styles in this image.

These drawings feature designs inspired by manga-style flight suits.



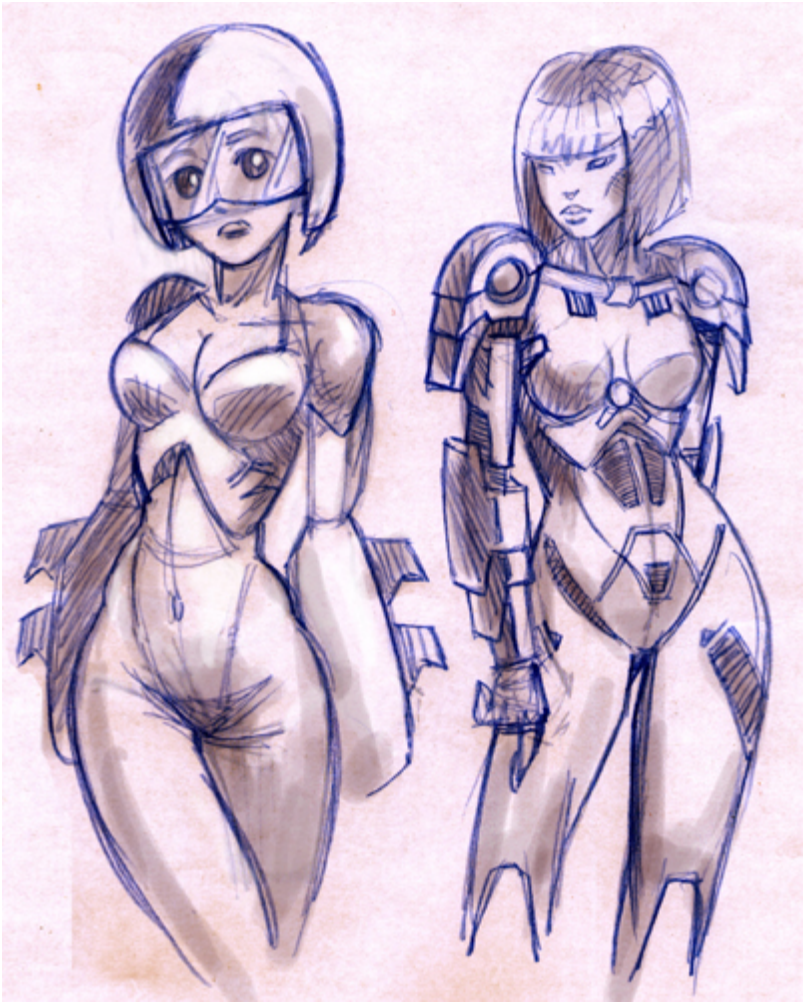


While researching the subject I noticed many of the females across the different styles of the manga style spectrum were extremely stylized. This is nothing new in comic and fantasy art of course, but manga could push it to extremes! Manga women tended to be very slim with absurdly elongated legs and womanly figures, yet features that were rather girlish. As my drawings started to take shape, I began to adjust some of the proportions to better suit my own sensibilities as an artist. (If you're trying out a new style, as I am here, it's a good idea to find your own "voice" within it, or it just won't develop naturally or easily.) I found the elongated body shapes were quite interesting when toned back just a little, but I adjusted the proportions so they might at least seem a little more

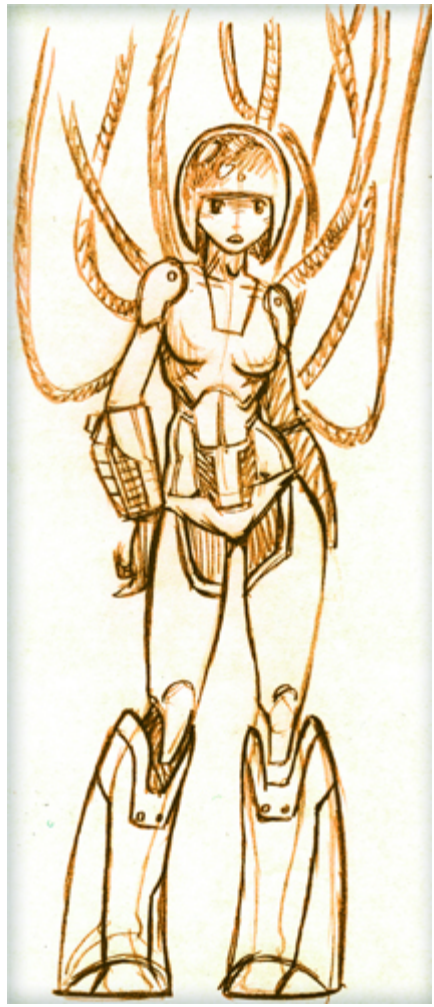
comparatively realistic. I then printed out a few templates shaped around some of my sketches, and built a few slightly more finished drawings. I opted to keep my designs more human-looking than obviously robotic, which is an established style in the manga genre, but I still wasn't sure how I wanted to evolve my design. One concept began to look promising when I put little "wings" on her arms, legs, and then her head. Right away the drawing had a character; you could easily imagine her blasting off into the sky, striking aerodynamic flying poses with hair streaming out behind. However, as I began working over my last template, I added some pipes coming out of the back of what was essentially a fairly plain drawing, and I had a brainwave. Almost twenty years ago I'd seen an image in an anime magazine, which featured a robotic woman who had skin and hair that looked very human, but from within gaps between the plates that made up her skin came lots of pipes, wires, and coiled tubing. (I think the image was for a movie called *Ghost in the Shell*.) It occurred to me that my robotic manga girl might also be wired up to something, but what?



This sketch has elements of aircraft wing design incorporated into it.



These sketches revisit elements from the previous drawings, blending them into new configurations.



This idea once again features parts taken from the previous sketches, but particularly develops the tubes and pipes connected to the back.

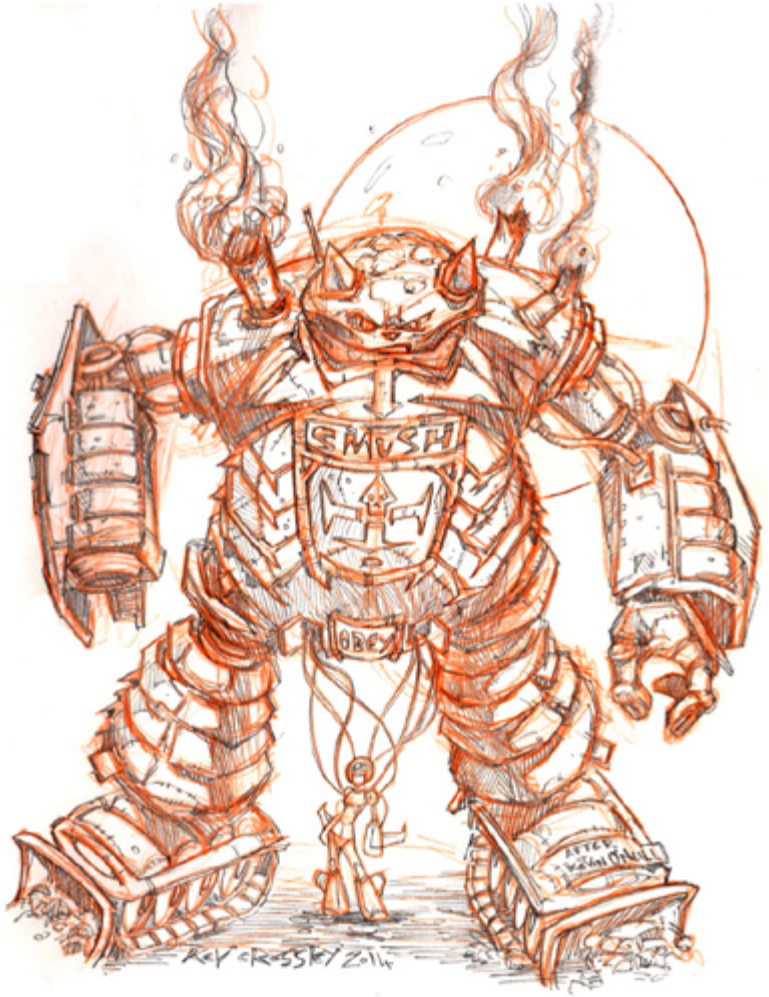
Without really knowing yet what I was going to do, I printed out a blue version of pipe-robot-girl to start a new drawing. I was still in two minds about putting aside some of the other designs, so I incorporated some parts from them into the new drawing, adjusting the proportions and shapes to suit the image. The numerous sketches gave me a lot of material to choose from, so I had a lot of fun picking and choosing which elements to include. Quite randomly, while looking through my digital photograph library I came across some photos I'd taken while on the ferry from the UK to France a few years ago, including some of a very cool-looking structure with

funnels or venting pipes of some kind jutting out of the top. I obviously thought at the time it might be useful down the line, and I was right! I decided to bolt a similar-looking structure onto each leg of my robot girl to see how that might look. The result was pleasingly strange!

I decided to keep the face simple, with eyes that were smallish overall yet still had that distinctive manga feel. To finish, I added a little extra detail to the pipes, which brought back the question that had been nagging me: What were the pipes for? Were they attached to something, and if so, what? The answer came while I was preparing material for the next case study. Robot Girl was attached to a giant robot, which was slaved to her mind. Rather than sitting inside a mobile suit, I reasoned that she could essentially hack into other sentient machines, then wire herself into their neural control center and have them follow her around wherever she went, as a body guard perhaps, or a pet. The idea amused me, but it also invested my robot girl with a sly intelligence and perhaps even a sinister edge. She had become a much more interesting character. To visualize the concept, I produced an orange Col-Erase sketch finished with my Rotring automatic HB pencil of the sort of robot she might choose to enslave. He didn't look too happy about it.



A photograph I took on the ferry to France provided inspiration for my new drawing.



This doodle shows what Robot Girl might be attached to.



The new sketch incorporated elements from other sketches and reference photographs.

Steampunk: ABC Warrior Mek-Quake

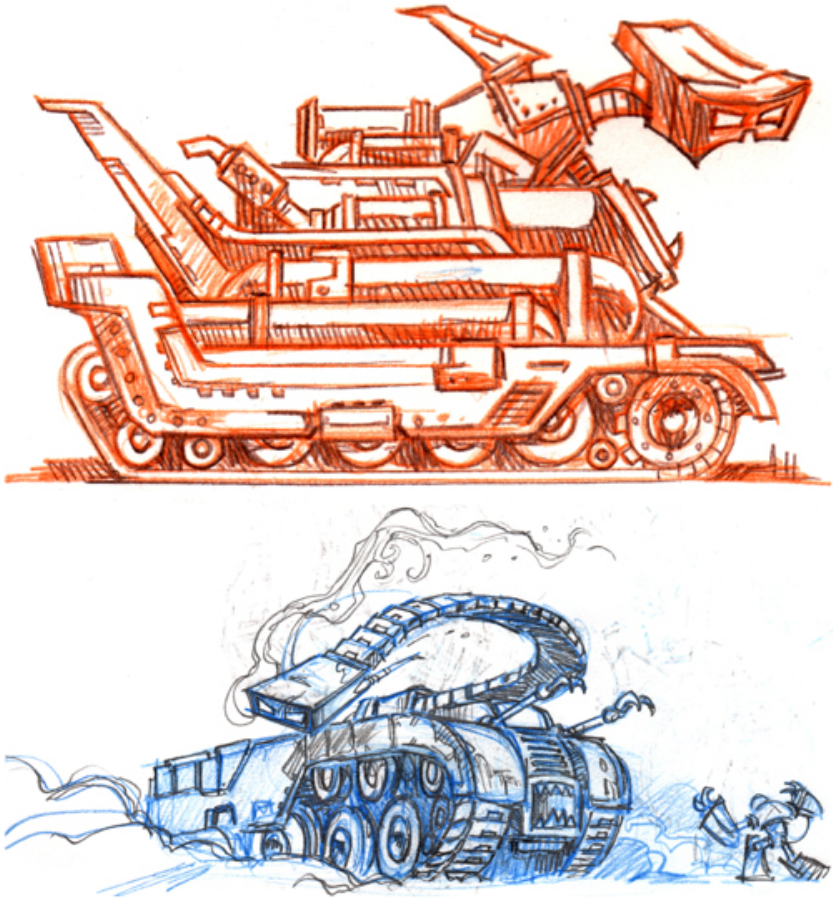
After Judges Dredd and Death (more on him later), the other *2000 AD* characters I wanted to include in this book were the ABC Warriors. As a concept they were tailor-made to appeal to sci-fi fans like me, and I've done many drawings of them over the years. As previously stated, the designs of the ABC Warriors changed quite a lot throughout their run in the comic. Some characters fell by the wayside, and new ones came in to fill the ranks, but always there were certain individuals that made up the core team such as Joe, Hammerstein, and Deadlock. However, there is one robot who has had a long, varied history within the pages of *2000 AD*, but who didn't make his debut as an ABC Warrior until fairly late on. He's called Mek-Quake (and he's already made his debut in this book, a chapter early). I wondered how I could adapt him for a case study, so I dug out my old comics and began to draw some of the different versions of him that have appeared through the years.

His first body was in the form of a gigantic bulldozer crossed with a tank with all sorts of appendages. The head that was attached to it has remained the one recognizable constant throughout all his various body shapes (with one odd exception: Mek-Quake made an appearance in a Nemesis story, and the amazing Kev O'Neill drew him looking like an enormous robot cat! At least that's what it looked like to me). After the cat body, Mek-Quake was reinvented by Bryan Talbot during his excellent tenure drawing the Nemesis character. Bryan gave him a smaller body than the two-hundred-foot-tall robot cat, but it was still about ten-feet tall and had massive arms. It was very mech-like in retrospect, with the trademark head reinstated. The story was a Gothic horror sort of tale, and looking at it now the steampunk aesthetic seems perfectly at home within it. When I realized that, I knew what I wanted to do.



The giant robot “cat” version of Mek-Quake was drawn originally by the fantastic Kevin O’Neill.

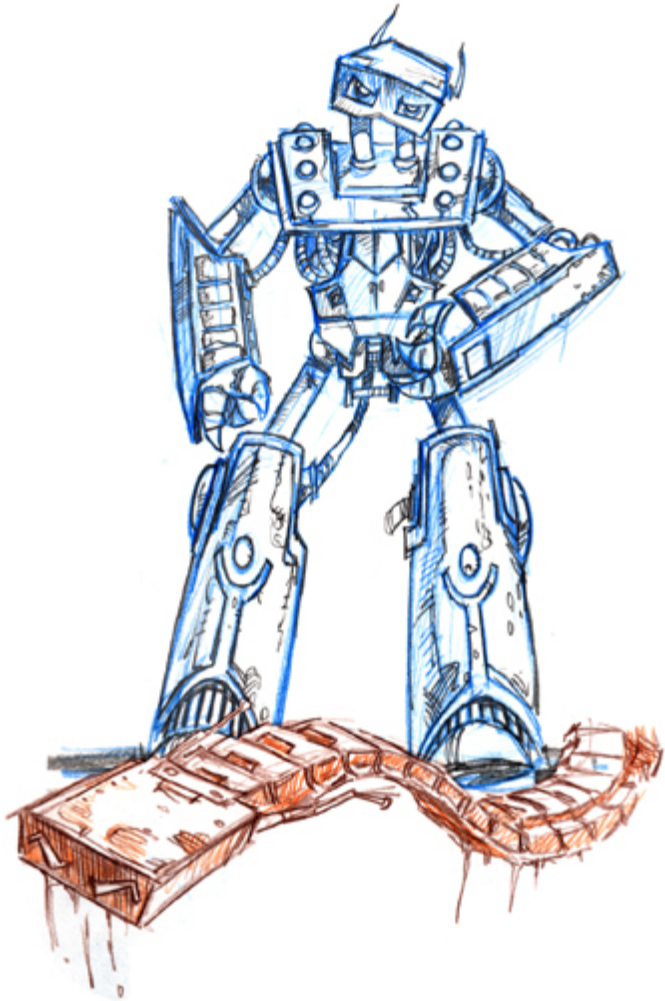
The bulldozer body more usually worn by the character.



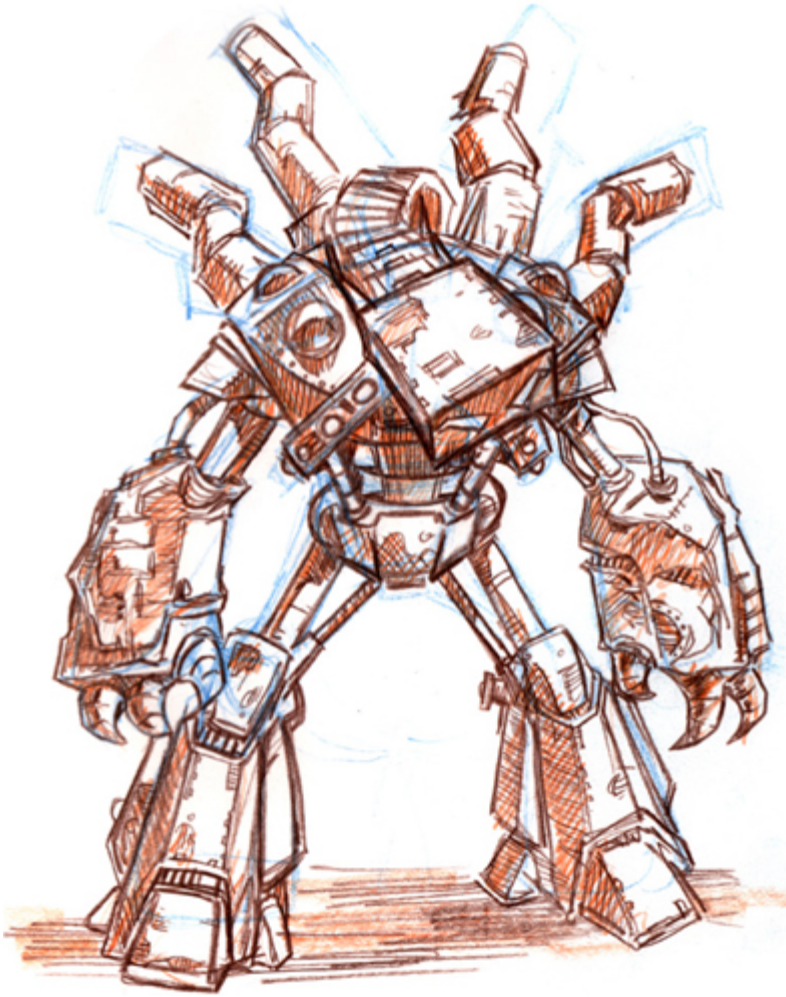
The ABC Warriors by their nature were always quite steampunkish, so it wasn't that much of a stretch to take Mek-Quake in such a direction. After spending a day or so familiarizing myself with all the past incarnations of the character (many of the resulting sketches are shown here), I decided to choose the biped version for this study. Not the cat though; however much I might have enjoyed drawing the two sketches you see in this book, it simply isn't the iconic Mek-Quake people are familiar with, so I went with the smaller, stompier version. I produced a sketch to see how it might develop, but the more I thought about it, the more I was drawn again to Bryan Talbot's version.

So it was one Wednesday afternoon while I was on a train home that I decided to do a bit of sketching on the back of an envelope with a

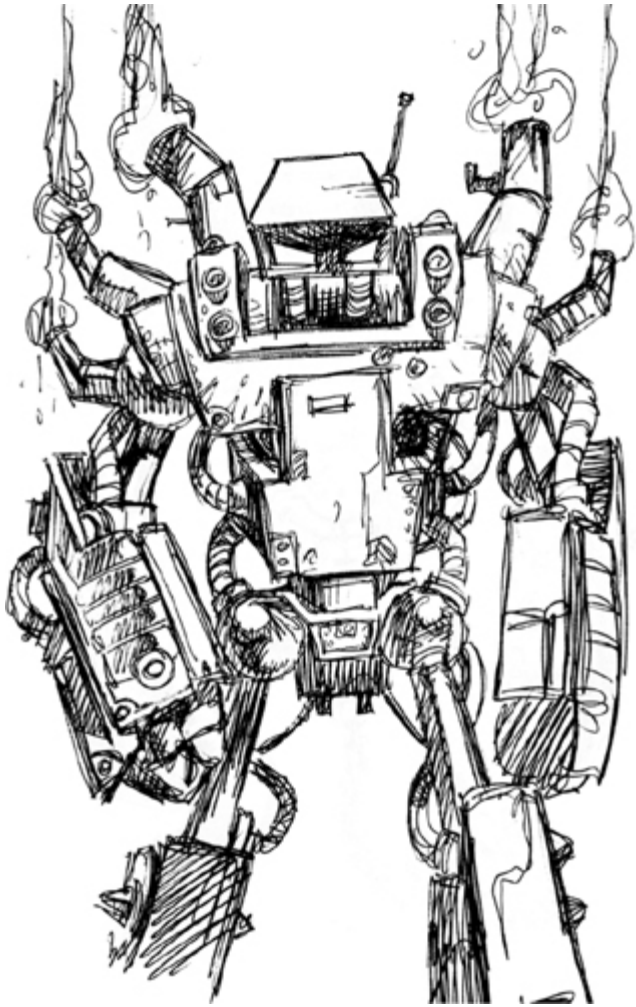
black ballpoint, the only drawing implement I had to hand. Mek-Quake was on my mind, and I couldn't wait until I got back to my studio to begin working on him. As I sketched I found myself leaning heavily toward Bryan's version. It seemed too perfectly suited to my purposes to ignore, so I allowed it to infiltrate my drawing, just to see where it might take me. I could only recall a rough idea of Bryan's version without having a copy of the comic with me, but I'd done a few convention sketches of Mek-Quake in this guise so I had some form I could draw on. I scribbled a few smoking pipes onto his back, and by the time I arrived at my station I had a sketch I was happy enough with to use as the basis of a finished version. I produced this in ink, and presented it as I would a convention sketch.



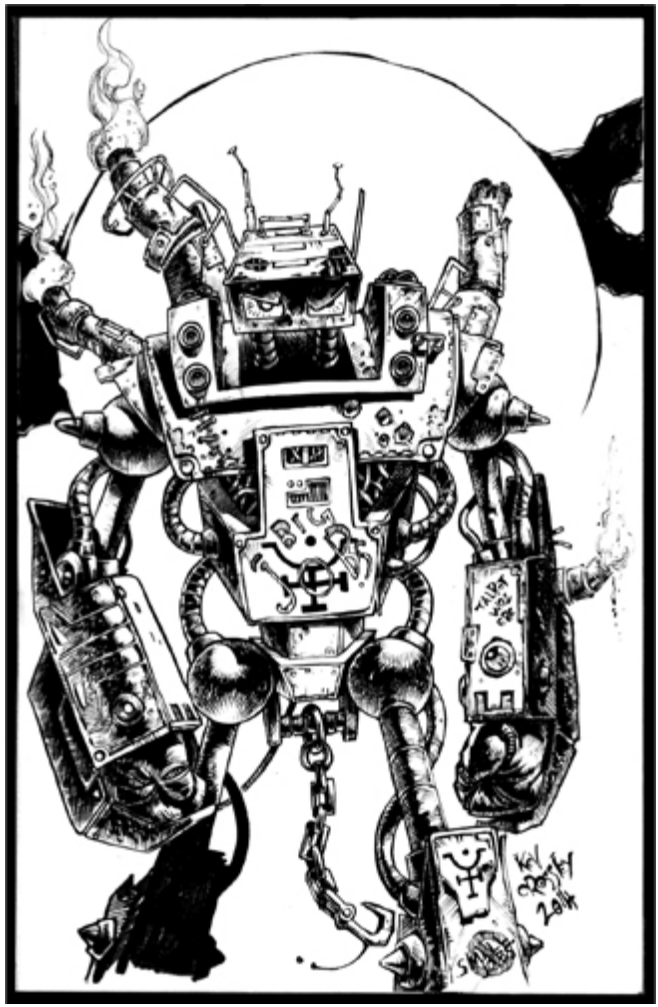
Several versions of the biped type were drawn by various artists.



A version of the character with pipes attached.



My train journey ballpoint sketch.



The final inked version became an homage to the incredible art of Bryan Talbot.

Let's Get Mechaphysical: Easy Mecha Design

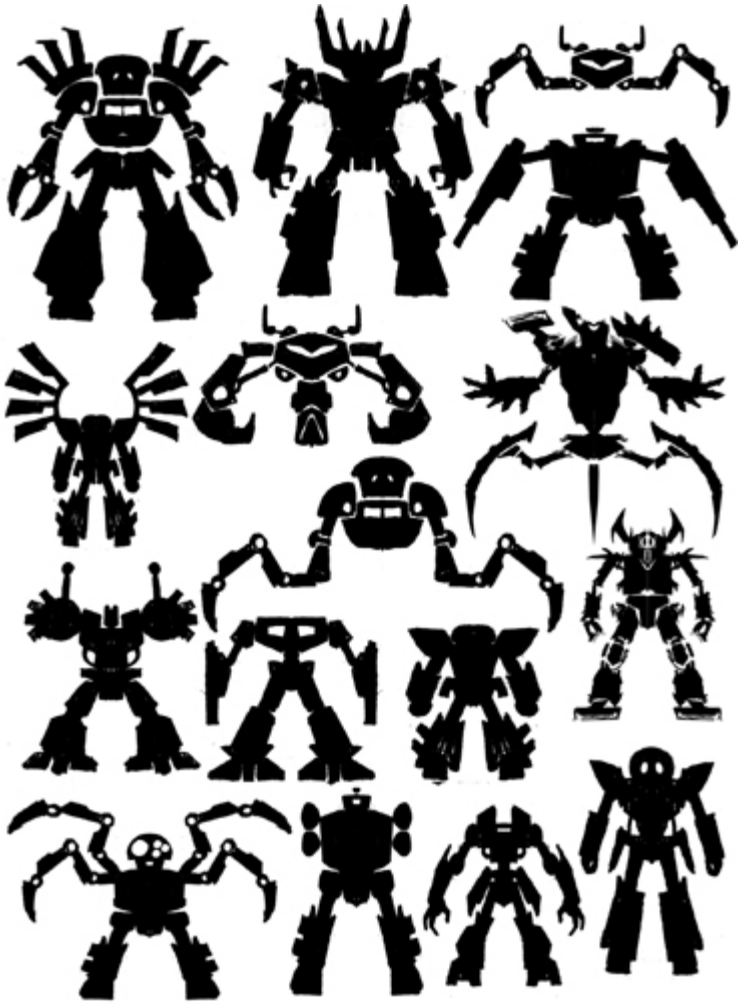
When you want to design something, whatever the subject, it helps to first immerse yourself in examples of images of that subject, and to research any relevant history that might inspire your designs. During my time spent researching manga art for previous chapters in this book, I inevitably found a lot of mecha imagery: Those giant, armored battle vehicles are ubiquitous in the manga universe and have been a huge influence on thousands of sci-fi artists and concept designers. They certainly inspired me as a child! It occurred to me that even though many mechas are gigantic, they are in fact just a suit of armor worn by a human. Indeed, they are also known in some stories as "mobile suits" so in this case study I'll not only show how to design a mecha, but I'll also describe a very easy and very useful way of creating the inspiration to begin in the first place.

I first discovered mecha when my local model shops began stocking the *Macross* and *Mospedea* model kits made by Imai back in the early 1980s, and although building the kits was fun, it was the amazing painted box art that really captured my imagination. The range of weird, walking tanks and Tomcat-style fighters that turned into humanoid robots blew me away, and I still have a folder filled with hundreds of the drawings I produced of all the various sorts of mecha specific to those titles.

Of course, the history of mecha design is far older and larger than the world of *Macross*, and I soon discovered *Gundam* and other later series like *Evangelion*. I still have much of this material in various forms: books, magazines, and DVDs (and model kits!). So, I dug out as much as I could, and began to sketch, finding my inner mecha and getting into the right headspace to tackle the task of designing one.



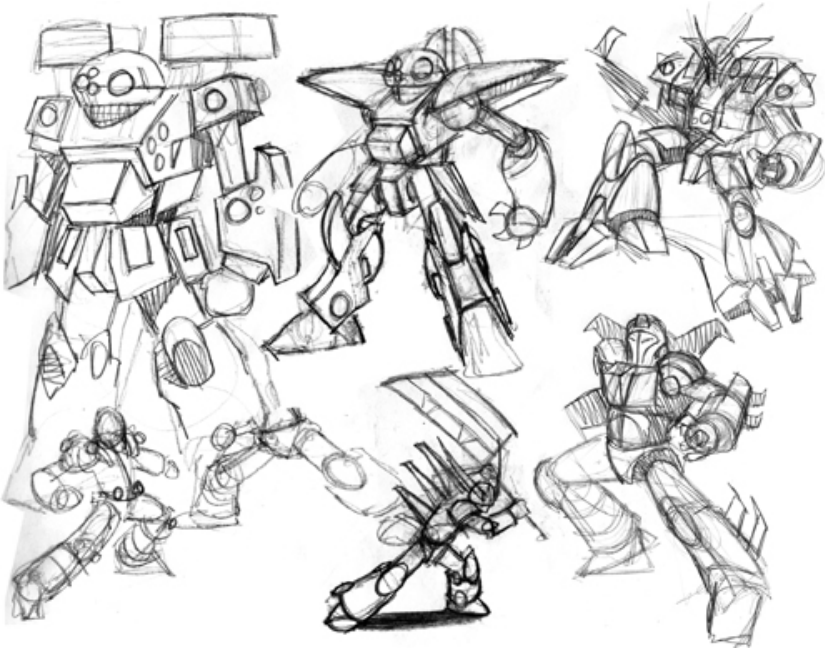
A page of simplified mecha shapes constructed from the sketches.



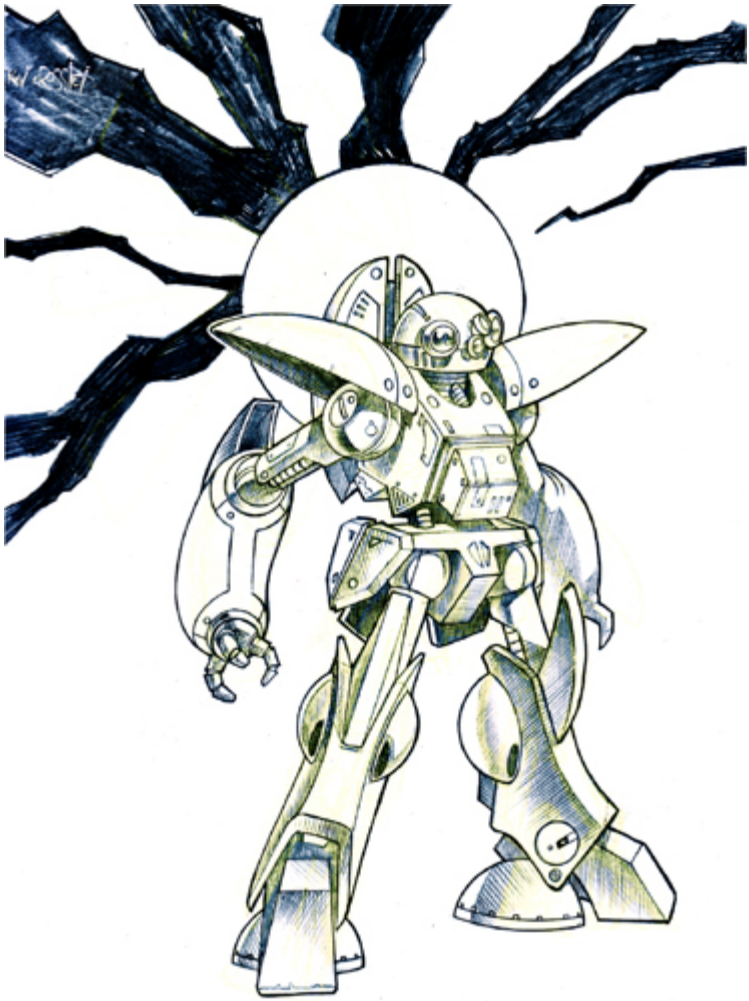
Sketches and random marks to base silhouette ideas upon.

After I'd gotten myself warmed up and ready to get my mecha on, I turned to a fresh page in my sketchbook and prepared to use a design technique I developed during my time producing concept art for video games. The principle involves producing a number of thumbnail sketches in silhouette of the subject you wanted to design, but not limited to only that specific thing. Such an approach strips away thought processes that might get mired early on in sticky detail or specific design issues, instead boiling the design down to simple black shapes or outlines. I thought this might be an interesting way to approach this task, so I filled a few sheets with scribbles and semi-random shapes. These were then scanned into

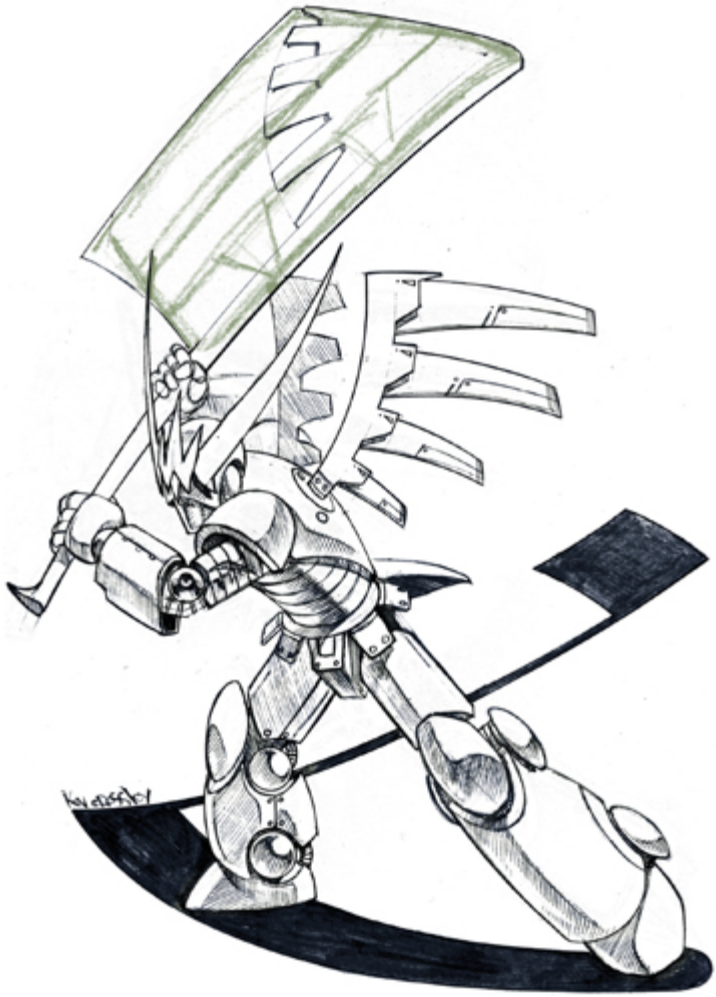
Photoshop and tidied up. It was then simply a matter of arranging the shapes into configurations that looked like cool mechas. It should be noted also that this same page of ideas could be arranged to resemble almost anything, and the number of variations possible is limited only by the amount of time you want to spend copying, pasting, transforming, and so on. After an hour of experimenting I had a good selection of ideas to take to the next stage. Inspired by these silhouettes, I produced a new sheet of more evolved penciled concepts. Unlike the previous stage where I had set out to come up with as many ideas as possible, I didn't want to get too carried away with numbers of drawings, so I only filled a single page. From the resulting sketches I chose two ideas to render up into finished designs. The great thing about this process is the feeling of creating something out of nothing. I had absolutely no idea where this exercise might take me, and there are yet many cool-looking silhouettes that I could develop into refined designs. In fact I dare say I could fill an entire book with mecha designs inspired by a few pages of thumbnails like these!



Sketches of various mechas and poses based on the silhouette designs.



Mecha concept one.



Mecha concept two—a more action-inspired pose.

Twisted History: ABC Warrior Deadlock

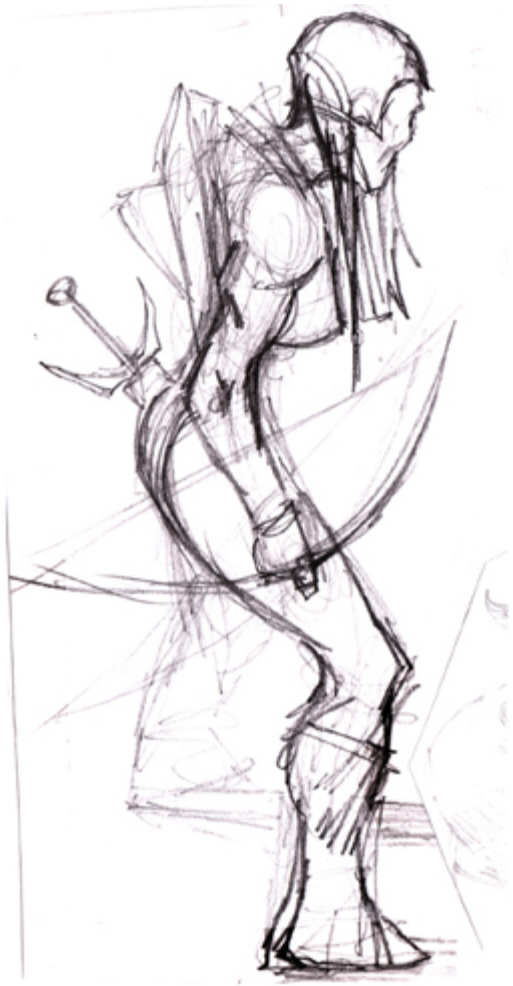
Deadlock the Templar Knight is another ABC Warrior from the *2000 AD* comic, and just like the other robot characters from this future war strip, he has undergone many changes of design and body shape over the years, depending which artist was drawing him.

Personally, my favorite ABC Warriors artist was Simon Bisley, whose "heavy metal" attitude and ever-mutating physiques had a lasting influence on me, as it did on many others.

While researching images for this book, I found an old drawing I did about ten years ago of a Templar Knight. This in turn was based upon an even older sketch I'd done of a warrior archer, so I've included this as well to show the full range of images involved in this case study. I'd had some fun with the armor and costume, but the helmet both irritated and intrigued me in equal measure. It wasn't quite right; in fact, it looked downright awkward with the mismatching horse-hair-bristle crest looking odd next to the perforated face plate. It looked a little too Romanesque, or Greek perhaps, which was totally incorrect for the period it was meant to hail from as a concept. Yet for all that, it did look a little Deadlock-ish. This similarity dug its claws into my attention and wouldn't let go. The Deadlock character has always been quite arcane, and even archaic in design, wielding as he does a giant sword and holding the title of Chaos Knight. It seemed to me a natural fit to produce a version of him as he might have looked had he been a Crusader Knight of the thirteenth century! So my first step was to see what I could do to improve this old imperfect character design.



An ink sketch of Deadlock.



The original sketch I used as a template for my old knight thumbnail.

The first task was to look at the helmet and make it more recognizably Deadlock. To do this I needed a template I could print out numerous copies of to work over quickly, so I produced a Deadlock-style head sketch traced over the original knight's head so the poses were matched. I elongated the face plate and removed the eye slits, setting them into the helmet above the face plate instead. These eye holes were enlarged, and the brow area above built up to add a framing device. Back on the face plate section I replaced the vertical holes with a broad, lined grill instead, which is the trademark "mouth" feature of Deadlock. The pointed cross is another identifying feature of his face, and once that was in place the

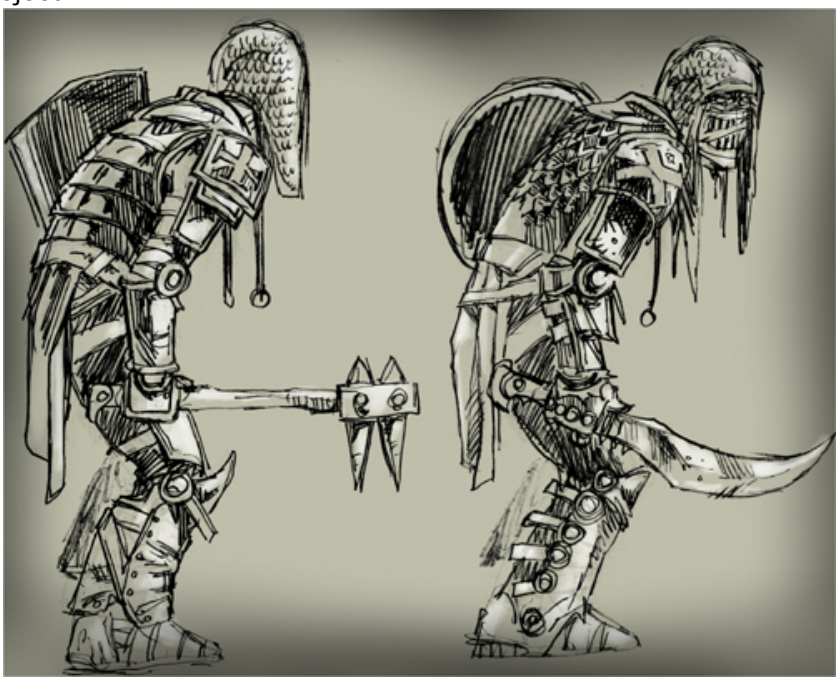
likeness was unmistakable. The template was completed, so I printed six templates of it and began to produce variant sketches. Some of the helmet designs I came up with referred back to actual historic examples and others were of my own devising. Very quickly I settled on one with a huge, curved crest mounted on either side of the helmet and curving all the way over. It was so eye catching, and suited Deadlock perfectly, although there was still something not quite perfect enough. I could address this when I got to the final version, so I turned my attention to the rest of the body.



New sketches of Deadlock's knight-variant head.

For this I traced over the original sketch to produce a couple of ideas, and these were all I needed to then begin my final version. Using elements from my new sketches and the original drawing too, I put together a new sketch. I also resolved the helmet design by splitting the crest and pulling the two sections apart. The result was now perfect! I inked this sketch very quickly, although I did relish adding lots of detail to the individual loops of chainmail. When I scanned the drawing into Photoshop, I felt compelled to add a little more detail to the dragon creature using standard Photoshop

brushes, and then it was done. As a character concept it suited Deadlock really well, but it also might serve as the basis of a future project.



A pair of new body sketches.



The final inked sketch of Deadlock as a Templar Knight.

Tech-Fantasy: Cyberdragon

Now, this book is about character design, but seeing as I slightly bent the definition of character with my mecha design section, I figured I would push it a little further in order to include an idea I had to redesign one of my favorite mythical monsters, and a mainstay of fantasy art: the dragon! You may decry this with shouts of, "A dragon is a monster, not a character!" But I would point you toward the dragon Smaug, most recently realized with great personality and malicious cunning in Peter Jackson's Hobbit films as an example of just how characterful a dragon can actually be. So, argument won, let us continue.

The line between fantasy and sci-fi is broad and blurred, and subjects that would appear to naturally belong in one camp can very easily be categorized as being part of the other. It seemed to me that some of the elements from fantasy could still make it under the sci-fi umbrella, albeit with a twist. To this end I thought it would be fun to take a fantasy staple, the dragon, and reimagine it in a cybernetic or mechanical style. I began with a new pencil version of an old digital painting I had produced called Krike Dragon.

I set about filling a few pages of my sketchbook with new sketches and ideas of how I could upgrade a dragon into a sci-fi mold. I referred to mecha design and manga sensibilities to try and capture a new aesthetic, and when I felt I had something to build on I printed out a light-yellow version of the original Krike Dragon pencil drawing over which I could build a new version.

The original drawing of Krike Dragon was composed with a more traditional lizard-like shape, but this didn't seem to work as I began to think about how to reinvent it in a cybernetic style. The key feature that just didn't balance was the rocky pinnacle on which the original creature perched, but if it was omitted from the new composition I would then have to think of something to replace it. An obvious option would be a building of some kind, but that just didn't seem a satisfying enough solution. So, the only option left was to fill the space with the body of the dragon itself, which in turn meant redesigning the creature's body shape—quite drastically as it turned out.



The original fantasy version of Krike Dragon, drawn in pencil.

As I referred back to my new sketches for inspiration, I was continually drawn to particular sketches depicting a snake-like, serpentine body shape. This increasingly seemed like a natural choice that would solve a few issues: such a free-form flowing body could be shaped easily into whatever configuration was required to fill the space left by the departed rock feature, but it would also echo the dragon concepts handed down from South-East Asian mythology. This seemed appropriate given that this new concept was being designed after the fashion of a modern fantasy mythology that has also emigrated out of the East, namely robotics and manga-style "mechology."

Armed with this basic concept I set to work on the new version, using a 2H pencil to lightly sketch out new shapes and elements of the dragon, erasing and redrawing any ideas that didn't quite seem to fit. I would then work over resolved features with an HB pencil, strengthening the line-work against the 2H pencil shading beneath. A putty eraser and electric eraser were used to lighten shadows and clean any smudges on the paper.



A page of sketches exploring cybernetic styled dragons.

As I progressed to the serpentine area of the body, a random, awry pencil stroke suggested a split in the body, which seemed like a serendipitous decision that would look rather good in the final image. So good in fact I then split each section again, this time into three, so I had to find a way to arrange six "tails" in such a way that visible legibility wasn't sacrificed for my design folly! I went back to my sketchbook again to make a few more doodles of what this split-tail section might look like before attacking the main drawing once more. After a bit of hectic sketching with the 2H pencil, I found an arrangement of swooping lines and curves that created movement

and energy without looking too cluttered. A final HB pencil session was all it took to bring the design to a fairly satisfactory conclusion, and after being scanned into Photoshop where I removed some remnants of the yellow template, the cybernetic Krike Dragon was complete.



A further page of sketches to work out how the split tail might look.



A page of sketches exploring cybernetic-styled dragon parts.



The finished cybernetic version of Krike Dragon.

Cartoon Style: Little Acorns & Robots

Video game production is one of the world's biggest industries, rivaling the movie world and arguably dominating the leisure time of the ten to thirty age demographic (although you could probably extend that range in both directions quite comfortably). In the early 1980s graphics gradually became advanced enough to portray something other than a square block on screen. This meant that the icons and sprites the player interacted with on screen could be designed to cleverly look like little characters and be invested with basic personalities. This in turn invited the player to associate with these characters and hence keep playing the game.

At first these characters on screen were, by necessity of the limitations of the technology, very basic indeed. They were essentially cartoons you controlled. Those of us lucky enough to have been around during that formative period of video-game adolescence witnessed those cartoons evolve beyond *Donkey Kong*, *Manic Miner*, *Mario Brothers*, *Zool*, *Sonic*, etc., into creations that hinted of what was to come. *Doom* and *Battlefield* are fine examples of an "end of innocence" within the game world, when the cartoon style of old gave way to allow games to show their adult colors.

But in an age when eye-bogglingly realistic graphics are the norm, this old-school cool cartoon style still persists, albeit just outside the limelight dominated by muddy gray war simulators and twisted reality survival horror games. And just like their realistically bleak counterparts, the cheerful characters that populate those endearing games need to be designed. Step forward artist Andy Gibson to describe his process for designing the characters for his multi-platform game *Little Acorns*:



Little Acorns Catch Up screen!

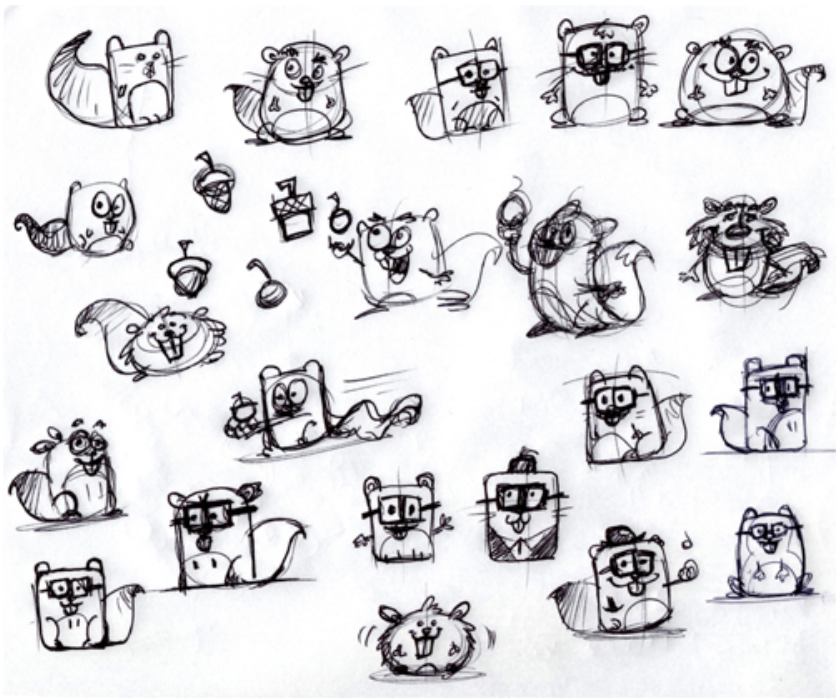
"As I reproduced the sketch in Illustrator I was very careful to translate the idiosyncrasies and kinks. The final art was destined for a video game, so I had to consider how each character would behave, and how they would be constructed: for example, would they need breaking into component parts to facilitate in-game effects and simple animations? Texture budgets weren't really an issue, but considering how big each character would be on screen affected my choice of line weight and detail.

Little Acorns

"After working in video games as an artist for ten years I wanted to make my own games, and *Little Acorns* started as a personal project, giving me free reign on the art direction. I wanted it look like a seventies Saturday morning cartoon so took influences from books like *Serial Boxes of the 1960s* by Bruce Scott and *Cartoon Modern* by Amid Amidi. Josh Agle's work comes out of this stuff too and I've always liked his inventiveness and sense of humor. Two other character design sites I check are linesandcolors.com and characterdesign.blogspot.com.

Panning for Gold

"Starting with a simple shape for the lead character Mr. Nibbles, I explored a few permutations. As I refined these ideas it lead to a brainstorm for enemy types, background objects, and other game elements. At this stage I was still sketching loosely on paper, just black on white, concentrating on line and shape to express character. When I started on the digital version I had a pretty defined idea of how the cast of characters would look.



A sheet of Andy's *Little Acorn* character sketches.

"In Photoshop I always try to use non-destructive techniques, such as adjustment layers and other effects applied to duplicated layers so I can rewind quickly. (Color Burn and Multiply are favorites.) I spend time creating custom brushes and paint with dual brushes to mimic more natural media, adding scruff and breaking up the surface texture of whatever I'm coloring. Using Ctrl-U/Cmd-U (Hue and Saturation), I can explore color schedules quickly.

"In the final image (whether it's a simple character or object, or complex environment), I try to sculpt anything extraneous away, such as redundant details or elements that detract from the visual legibility of the image. I'm always striving for a refined shape, good

line weight and balanced palette.



Baddies and enemies!



Final Illustrator renders as they will appear in game.

Achievement Unlocked

“Bringing a character to life from scratch is about the most rewarding part of what I do. There are so many great character designers working today it’s impossible not to be inspired by their example, which in turn helps you to improve your own designs and process. Working in different styles can keep your results fresh, but good foundation skills will always be applicable, no matter what sort of character concept designs you want to produce.”



A wintery screen grab.



A springtime level from later in the game.

Robots

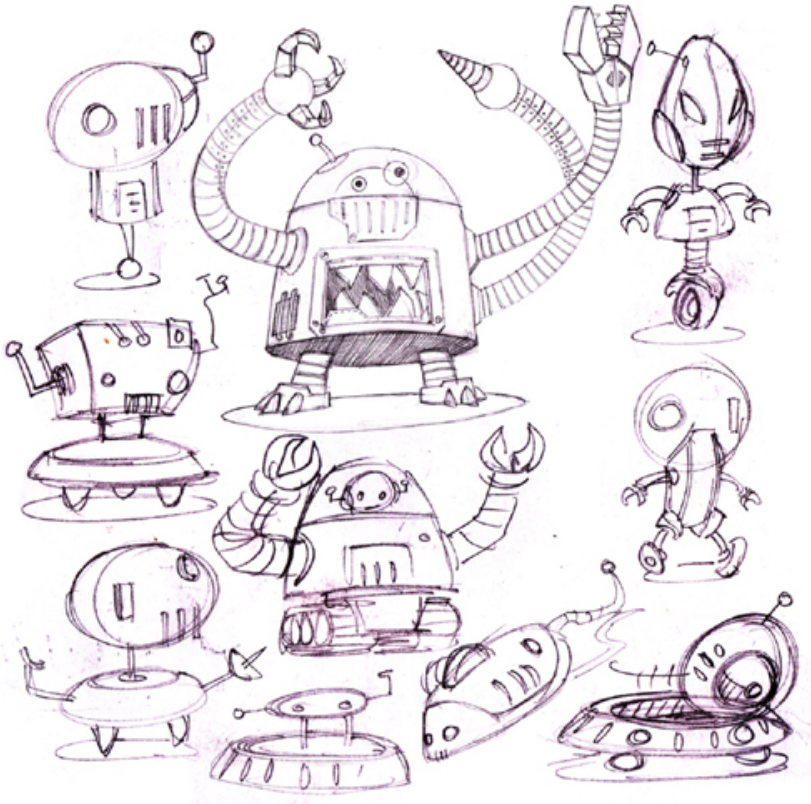
Inspired by Andy's fresh and cheery approach to character design for his games, I felt compelled to fill an A3 sheet of paper with lots and lots (and lots!) of little doodles, which turned into cartoon-style robots. I liked them so much I thought it might make an apt addition to this chapter—a little extra something to continue the jolly vibe begun by Andy's colorful, oblong critters. It's also another valid exercise when looking at character design, one we've seen many times throughout this book to one degree or other, but here it's maxed out!

I was lucky to share a studio with Andy for four years, and he introduced me to ways of working I'd not really practiced before. The best technique, though, was to simply fill page after page of doodles inspired by a brief: to produce version after version of the same principle idea, then start again with another idea, repeat the process, then repeat again, and again, and again. The first time I tried it I ran out of steam pretty fast, I just couldn't come up with that many variations so quickly. However, with a little perseverance I was soon upping my doodle quota to Herculean amounts!

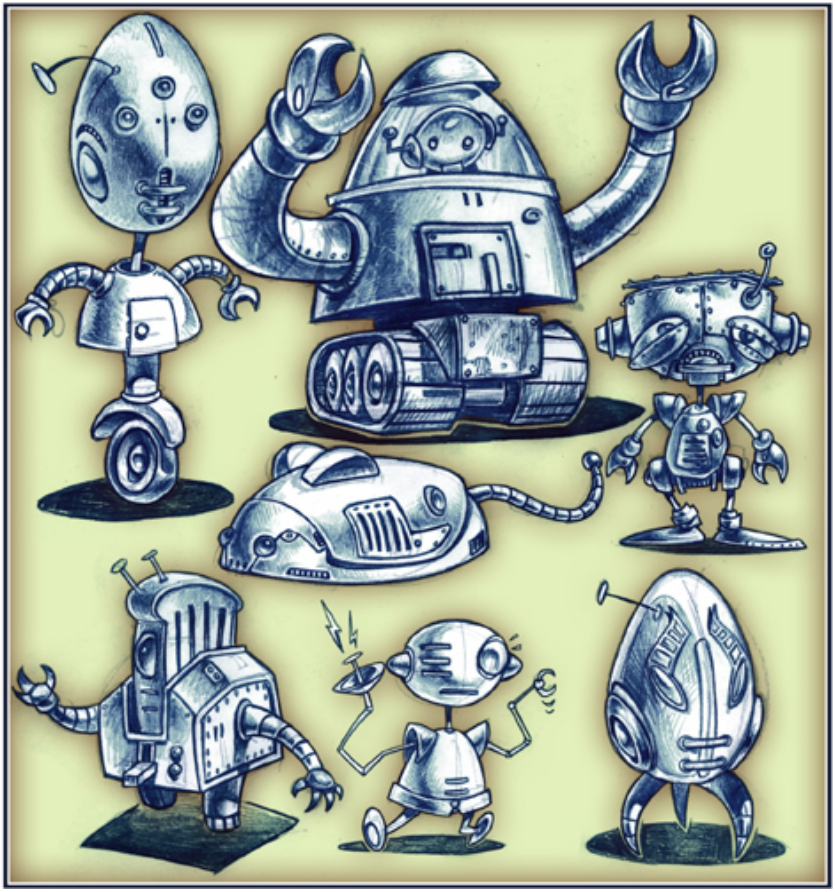
So, for old time's sake, here are a couple of sheets of robot sketches, and from them I've picked a small selection to render up into finished designs. These could be developed further, or turned into turnarounds for use in a game or TV show. Or they could be seen by the son of the author, who then petitions to have them framed to hang on his bedroom wall.



Lots and lots of tiny robot doodles.



A few more robot sketches.



Finished pencil drawings based on some of the sketches.

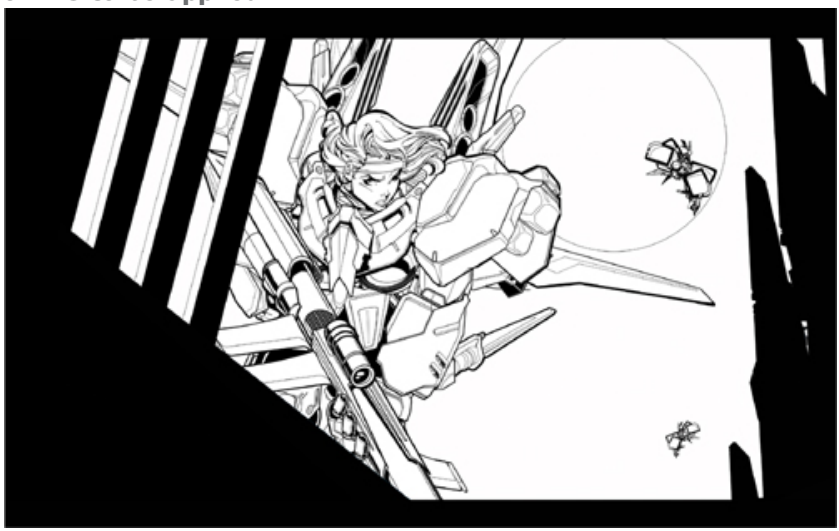
Sci-fi: Manga Maiden

For this case study, Paul Green once again shows how he develops a character from sketch to eye-popping finished art. This is Manga Maiden!



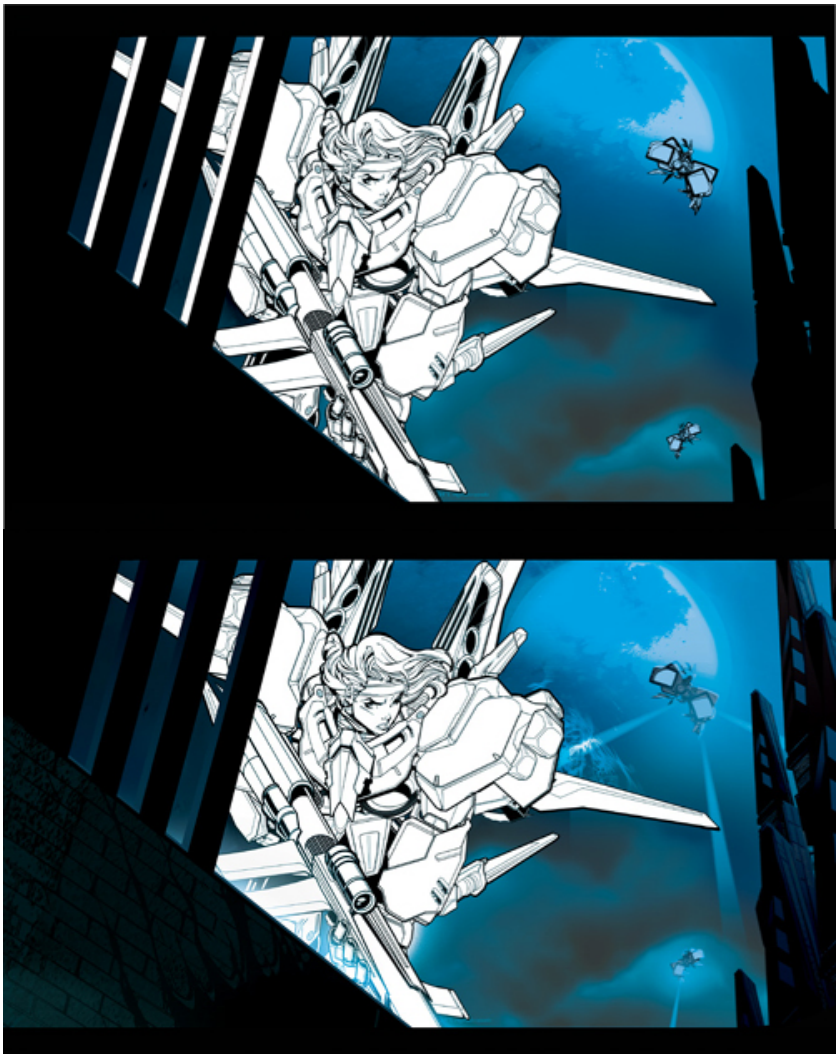
1 **“Initial Sketch: Rough shapes are used to set out the composition. Small areas of detail are added and worked to flesh out the piece.**

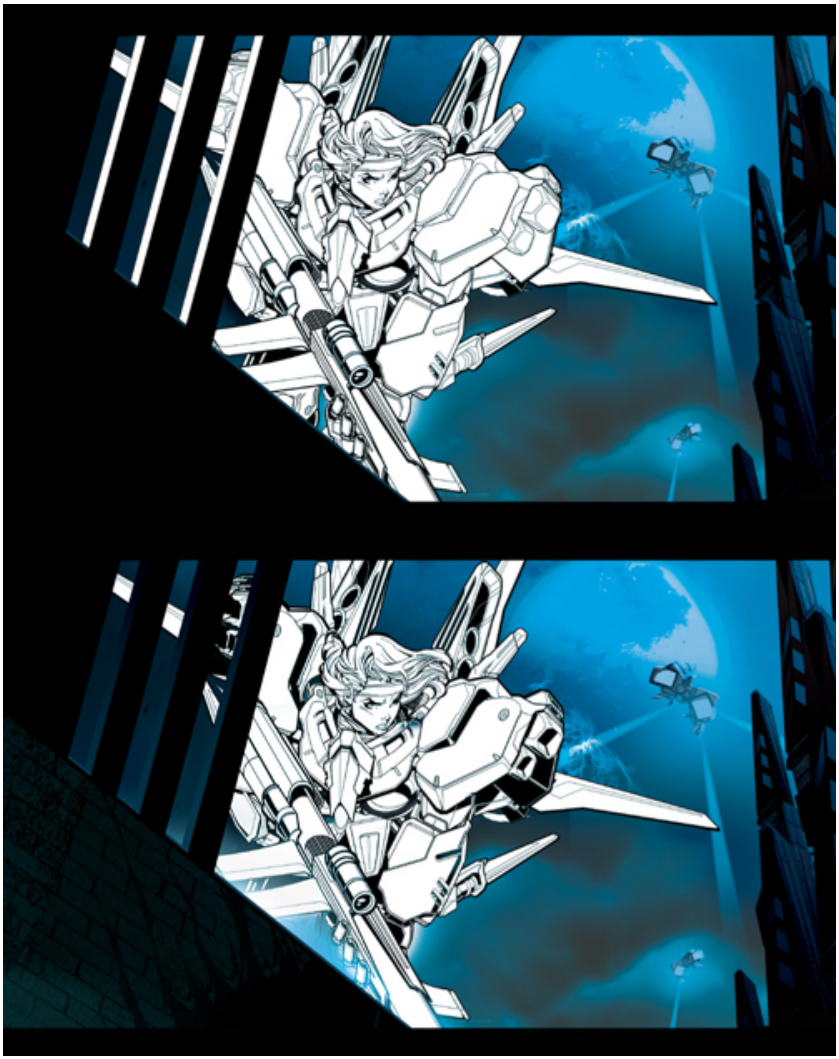
“Rough sketch: Detail is added to the initial sketch to flesh the composition out further. The face is given priority here, as is the detail on the main character’s suit. Slowly, the piece is built up until I’m happy that enough detail is added so that I can move onto the inks. The pencils don’t have to be perfect; they’re really only a guide for the ink stage. I know where the detail will be. The final sketch is scanned at 300dpi and opened in Photoshop, ready for the inks to be applied.



2

“Inks. The inks are achieved in Photoshop using the Polygonal Lasso tool to define areas for the inks. It’s a long job, perhaps ten hours to get the overall effect I’m looking for. Finally, when the inks are achieved, various areas are cut out and assigned different layers so that they can be more easily manipulated at color stage.

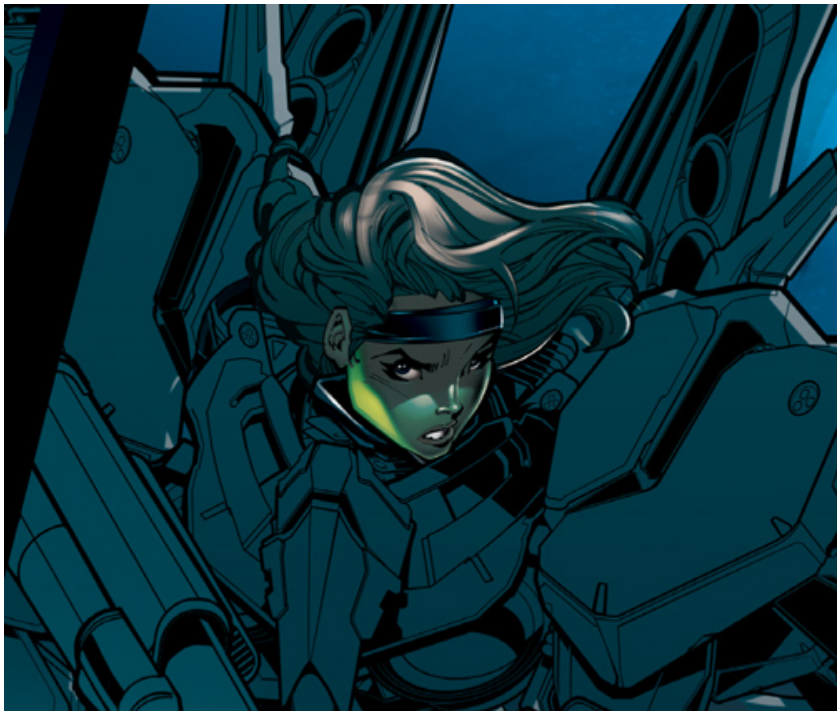




3 **“Backgrounds. I work on the backgrounds first to get an early sense of depth. The backgrounds are quite generic here, except for the buildings and the ships. Both the buildings and the ships are given a base FX in Photoshop and the detail worked on top of the Base Layer, on separate layers. When I’m happy with the effect achieved, I’ll flatten the layers to tidy up the workspace. The lighting FX are achieved using brushes with the layers set to**

Overlay to give the effect of luminescence.
Lighting effects are applied behind the main character to lift it from the background. The foreground is worked next, using dark colors to frame the main character.



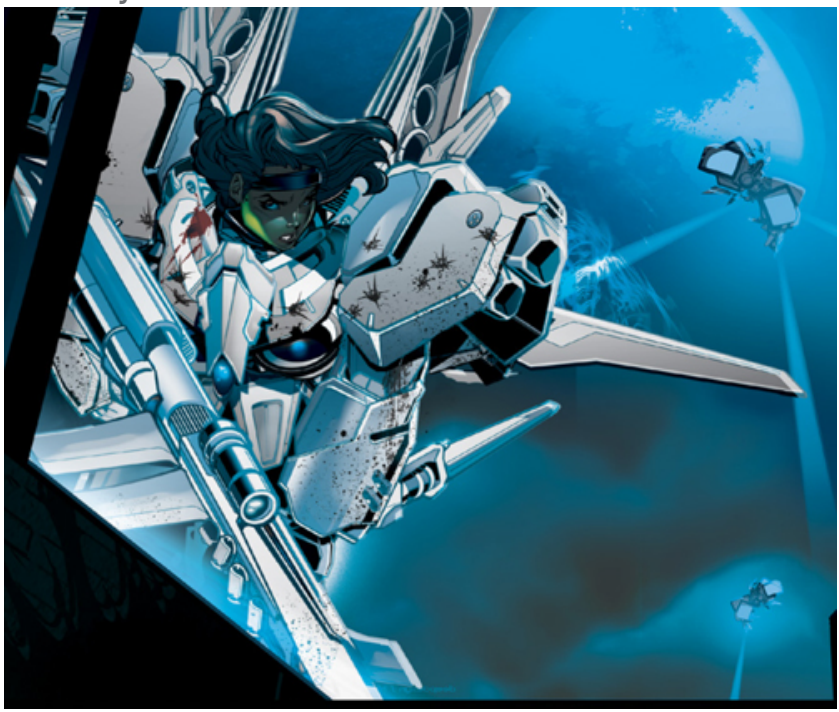


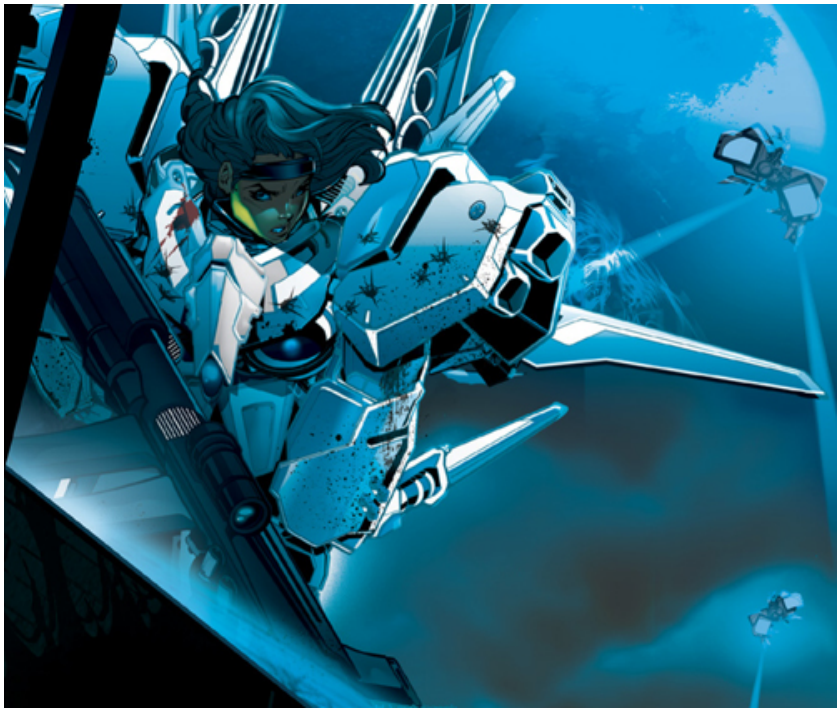
4 **“The main character’s layers are given a flat color, which I use as a base over which the main detail will be added. First, I work on the head and face as it’s usually the focus. Get the face right and the rest will follow. Each of the face components (hair, eyes, flesh, bandana) is given their own flat color base. The detail is worked on separate layers, slowly building up transparencies and FX like Overlay and Screen for ambience. Finally, the layers are grouped and flattened (preserving the originals) and a Layer FX applied, deepening the colors.**



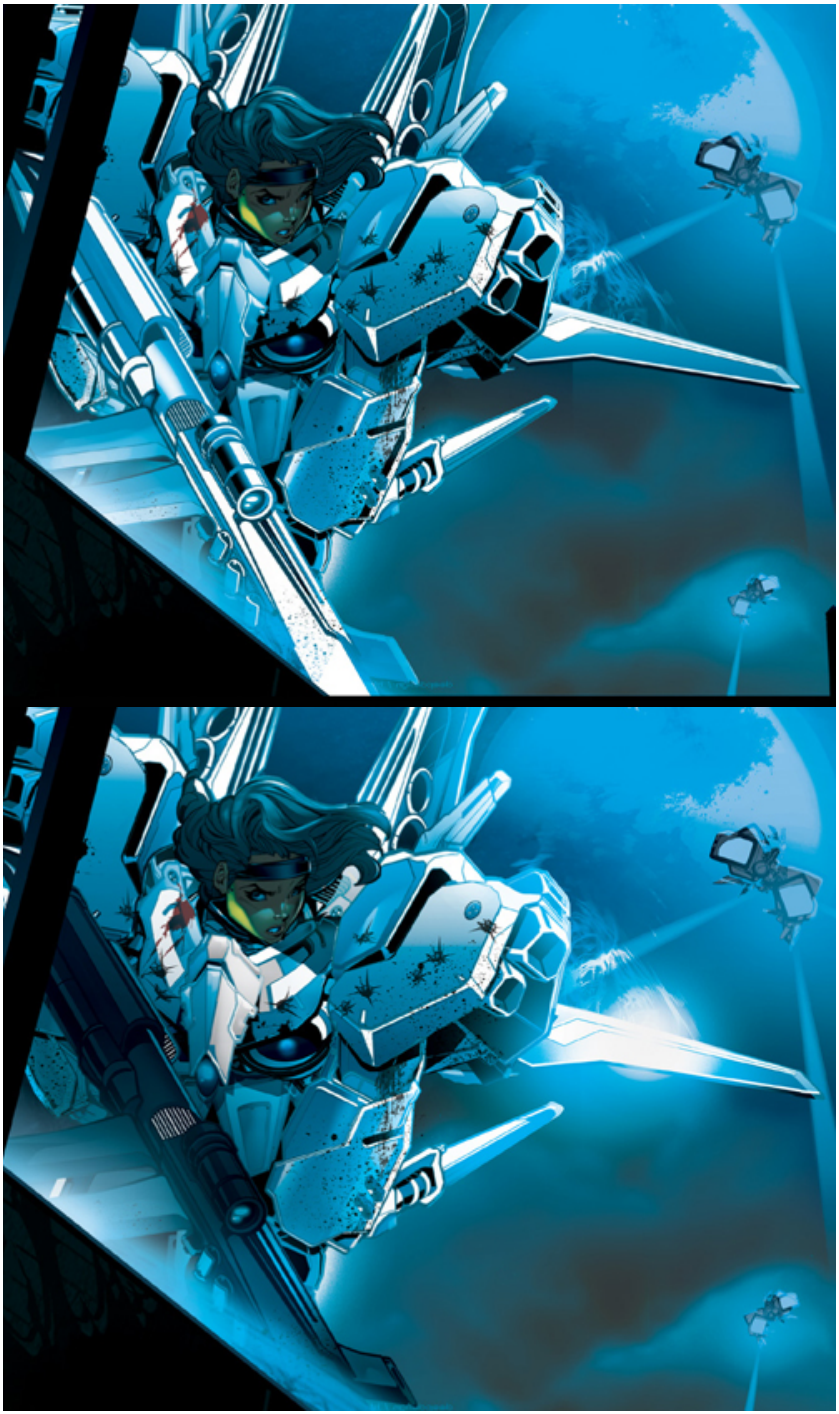
5 “PADS. Similarly, the Pad Layers are given their own flat

color on the Layer Properties. The detail is worked up slowly, mindful of the ambient light in the background. Finally, the bullet holes are dropped onto the layers, set to Multiply so as not to obscure any detail below.

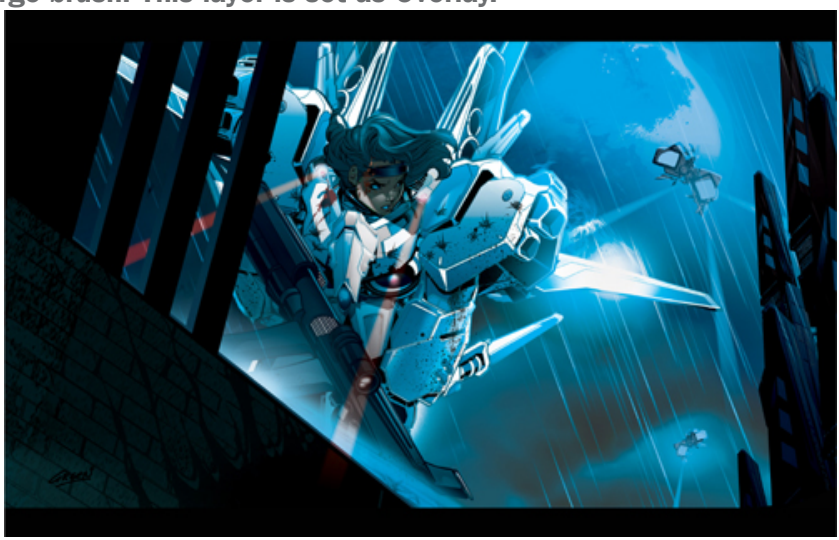




6 “Exactly the same processes are used on the rest of the character’s isolated layers until all elements are completed. Here, the whole image is grouped and flattened and an FX applied, similar to the one used on the head. I want to give the character some ambience. The overall sense of lighting is dramatic, but given her suit is white and reflective, I want it to pick up and reflect the surrounding blue light so I apply a blue Overlay to it. It looks quite flat at this point, so using the wand tool, I pick out the areas that should be highlights and copy and paste these over the FX Layer to give further depth.



7 **"The gun is darkened, setting its Layer Properties to Multiply with a dark color overlay. Some of the suit will be exposed to the sky's light sources, so a reflective area is highlighted with a large brush. This layer is set as Overlay.**



8 **"Finally, any last areas I want to highlight are picked out with the wand tool for the Base Layer and the final effect of the lasers applied. These are achieved using the lasso tool to define the laser lines before color is stroked in using a brush. These areas are built up slowly, with the brush set to 50%. Finally, the layer's channels are manipulated to give the correct red color I'm looking for (in CMYK, C and K are turned off)."**

Wow. Not only has Paul created a fantastic character design, he's followed through to turn it into a stunning piece of art, full of atmosphere, drama, and intrigue. (I want to know what happens next!) Like all artists, Paul has developed his own process with which he feels comfortable, and I have to admit I've picked up a few new tricks from studying his workflow!

Sci-Fi Horror: ABC Zombie Warrior Hammerstein

And so we come to the last of the four ABC Warriors making an appearance in this book. Hammerstein is the sometimes-leader of the warriors (although Deadlock might dispute that fact!). He's an ancient battle droid with one hand replaced by a hammer, and with tank tracks for feet. Initially I thought I might reinvent Hammerstein as a super shiny, hi-tech polished super-droid, but it simply didn't seem different enough. It never really grabbed me and I didn't even start any sketching for it. Inspiration came, however, while looking through old sketchbooks (again)—zombies!

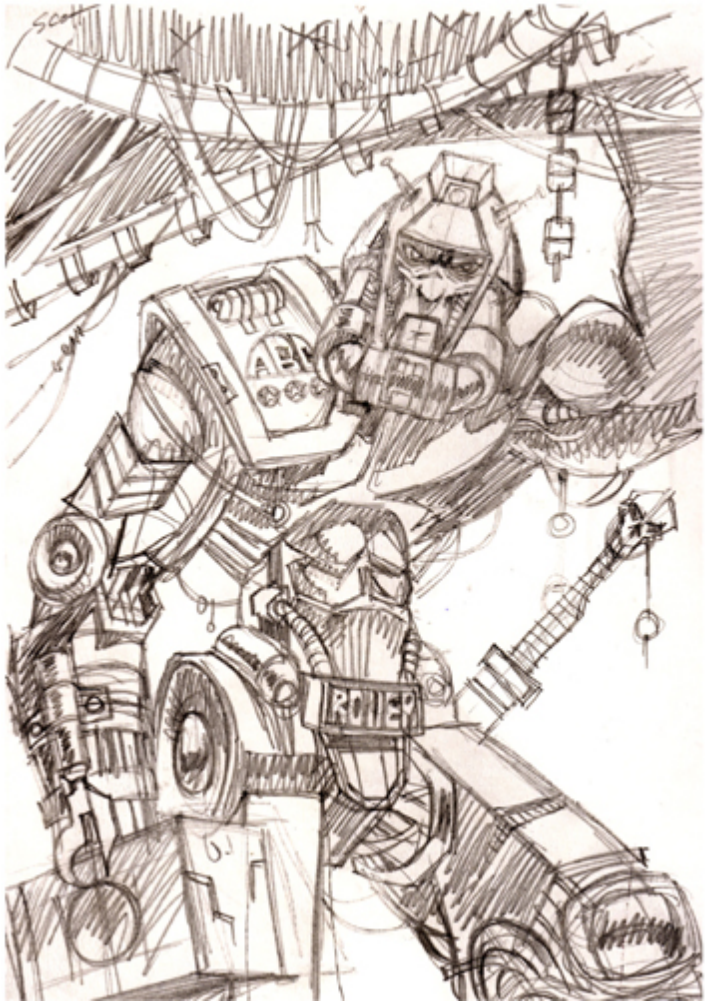
In particular I found one sketch that sort of reminded me of an ABC-type robot, so I thought to myself, "Hey! That's a good idea! Why don't I do a zombie version of Hammerstein?" And that's exactly what I decided to do.

Because this would be a twisted horror version of the character, I thought it would be fun to use a pose I'd already created for him—to present a "dark mirror image" version. The original drawing was actually my first art to be published in *2000 AD*, and since then I'd also done other variations in pencils, gouache, colored inks, ketchup, etc., but never as a zombie!

However, before I could make a start on this new version, I wonder if you can guess what my first preliminary step was? (If not, you really haven't been paying attention!) Yes, I got out a couple of templates to knock up some sketches.

Now, not only is Hammerstein a robot, but in this instance he was also meant to be zombified. Human zombies are usually made to look like walking, rotting corpses in various stages of putrefaction. Some body parts might be missing and areas of the skeleton might be visible. How do you do that with a robot that doesn't rot and has no skeleton? It seemed to me to be a matter of how you define the word "rot." A metal robot can still suffer degradation. Bits can go rusty and fall off, or areas of plate could get damaged, revealing the interior workings. So, the first thing I did on the first sketch was to draw the head and remove the nose to leave a hole, which immediately made the face look skull-like. (What does a robot need a nose for anyway?) I also thought about somehow doing something different with the hammer. It's usually shaped like a huge, squared sledgehammer, although it was rounded at one point too. Then it struck me: What would a claw hammer attachment look like? I sketched this onto the hammer arm, and wasn't immediately

appalled, so I left it in.



A pencil sketch of Hammerstein.

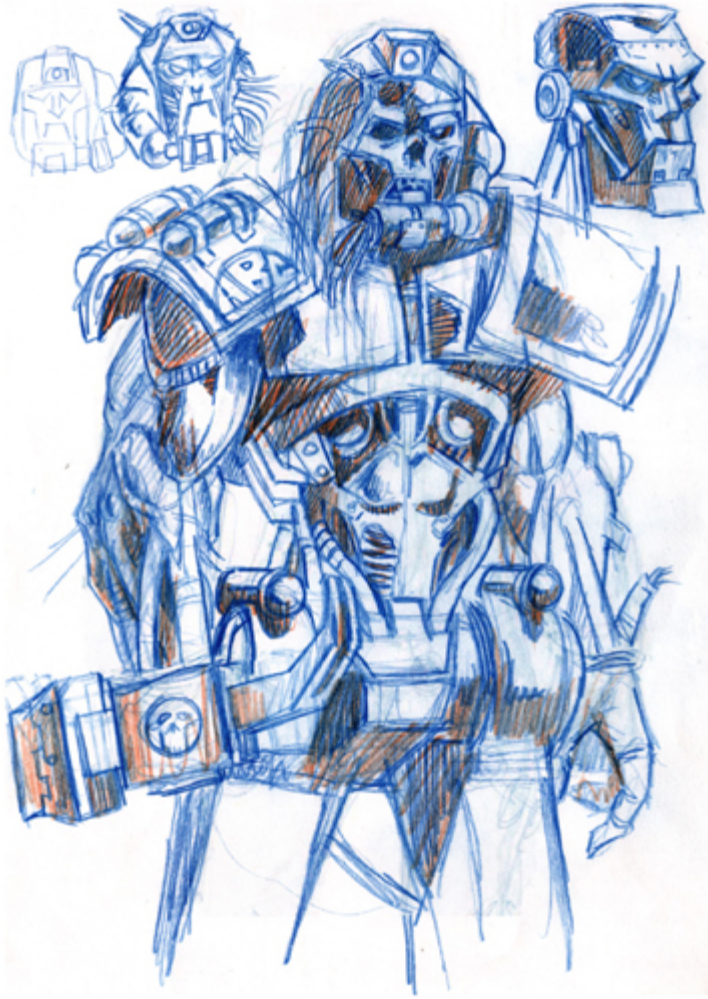


Old zombie sketches.

While thinking about the torso I was inspired first by the Simon Bisley style, which looked very body-builder-ish, but I'd already gone that route with Joe Pineapples. This time I wanted to present a humanoid robot that actually looked like a robot, at least in some respects. My solution was to have a few sections of armor plating (on the arms and stomach) that looked quite anatomically muscled, but to balance that against a chest and pelvis that were obviously more mechanical. Inspired in part by the strange Ant Queen from earlier in the book, as well as the fire-goblins I'd also done (which were steampunk zombies really), I experimented with a few ideas until I had something that started to look okay. When this first template was complete, I did a

bit of work on a second to try out a few more ideas, but I'd more or less settled upon what my zombie Hammerstein would look like. I then traced over my original drawing to capture the pose, and began to fill in the details for my final zombie ABC Warrior.

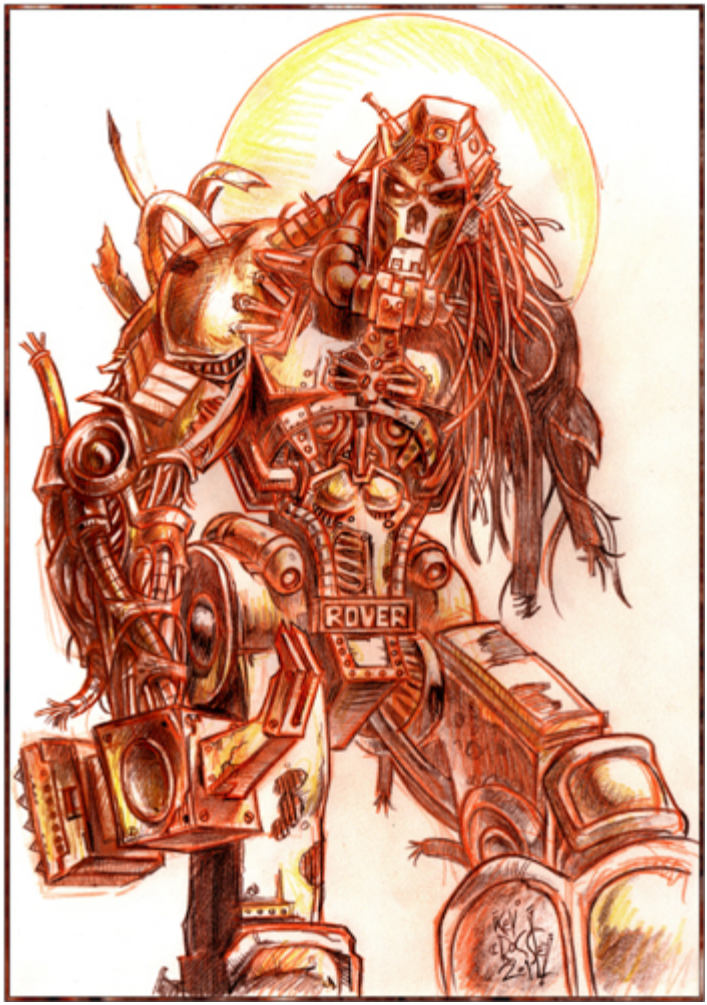
I used an orange Col-Erase pencil to work out the broad strokes of the figure before refining the design and adding definition to areas that were quite vague in the sketches. In particular I resolved the hammer arm by implying the thin, metallic "skin" had been mostly torn away to reveal the corded pipes beneath. I also polished the claw hammer concept a little, which absolutely sold me on the idea! (Why had I never thought of this before?) What was curious was how the areas I had initially planned to look quite muscular ended up being toned back out of necessity, and I also opted to leave out the shoulder-pad entirely, reducing it to a cluster of rib-like metal bands. I amputated the other arm entirely, reducing it to a shadowed cluster of dangling pipes, which also worked well against the tangle of thinner wires spinning out of Hammerstein's head. I finished the drawing with a brown Col-erase pencil and a dash of yellow to add a little bit of depth. The only question now was when would I find the time to zombify the rest of the Meknificent Seven!



My first sketch of zombie Hammerstein.



Another quick doodle I used to work out some more ideas.



The final art rendered in Col-Erase pencils.

Fantasy: Goblins & Orcs

All these orcs that feature in this chapter are from a story I began writing years and years ago (which I might finish one day—or never).



Sketches of what the facial deformities of the orcs might look like.

Gape Orcs

The first are Gape Orcs: hideous monsters with massive holes in the middle of their face. I put a lot of thought into their backstory, which involved a gigantic sleeping dragon whose millennia-long slumber has caused its body to become indistinguishable from the mountain around which it wrapped itself. Although centuries of plant growth and erosion have weathered it into the landscape, the sulfur seeping from its skin and especially from its breath had corrupted and polluted the land and life around it, resulting in mutations in both plant and animals. This includes a tribe of orcs, who revere the sleeping dragon as a deity. As a result of their long lives living in such close proximity to the ancient corrupting beast, their skin has taken on a mottled, pale, sulfurous pallor, their eyes red-rimmed and crazed. But the most distinguishing feature is the nose, which tends to get eaten away by the corrosive vapors rising from the acidic pools that fester around the Dragon Mountain, leaving a gaping, dripping hole in the middle of the face. Nice.

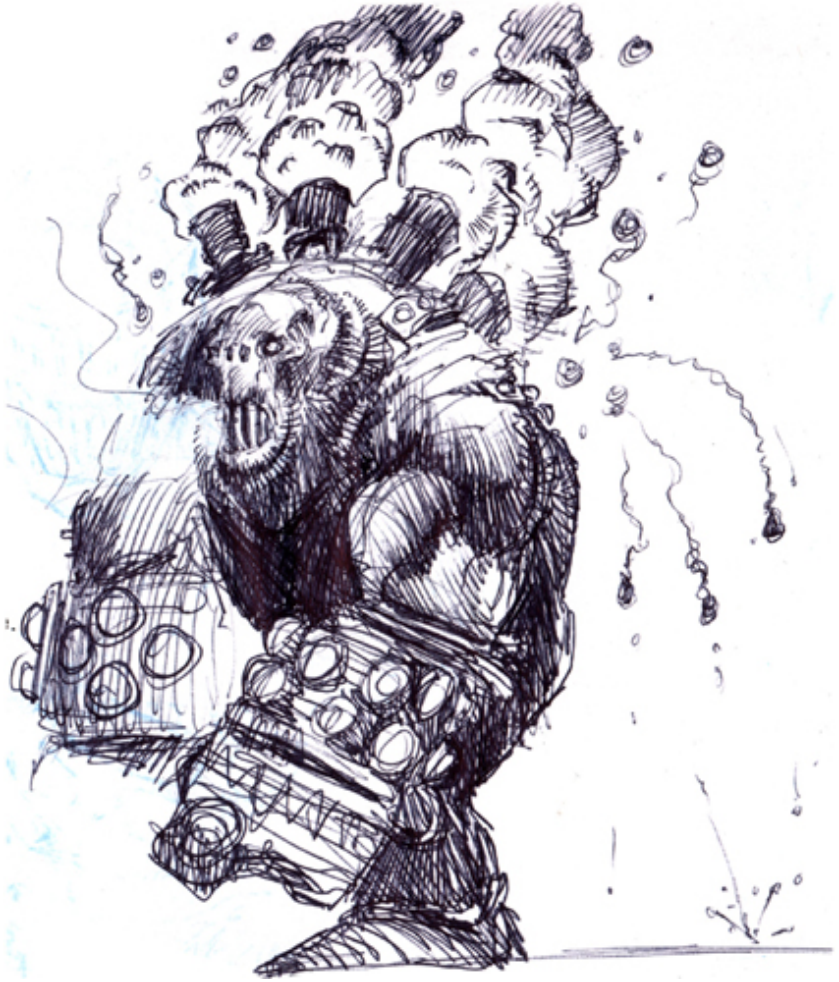


New drawings based on two of the sketches.

Fire Goblins

I thought I'd return to the steampunk subject for these orcs. These creatures are basically zombies, resurrected by a necromancer, then mechanically altered to incorporate an internal furnace that drives the undead orc using heat and flame. (I'm sure I must have concocted a very believable reason for, and description of, this process, but I think it was simply a thin excuse to design monstrous goblins that looked awesome.) So, now I've successfully justified

these vile monstrosities, let the pencil fun begin!
I started by referring to an old ballpoint doodle I did about twelve years ago of a “fire troll.” This beast was actually very similar to my fire goblins, but much larger. I liked the feel of it, so the first page of designs I produced stayed pretty true to this concept. Next I sketched up five differently shaped templates to represent a range of sizes and forms for the goblins. I printed these out in light yellow and worked over them using orange, then finished with brown. I gave four a metal grill over the mouth and a larger one in the stomach, which could be opened in order to shovel fuel in. The shortest one was the real oddity, in that I gave it a head that had a gaping mouth so huge it looked dish-like, and was encircled by jutting shards of metal, which resembled vire teeth. (More on vires in the next part!) Some also had random numbers of differently sized pipes coming out of their backs, arms, or shoulders. I experimented with different sizes and shapes of goblin, and gave some semi-mechanical limbs. I figured these creatures would be driven by hunger, just like the modern-day zombie, and to keep going they would have to eat as much as possible, preferably enemy soldiers, but basically anything they could get their hands (or various metallic appendages) on. Cool. Grim, but cool.

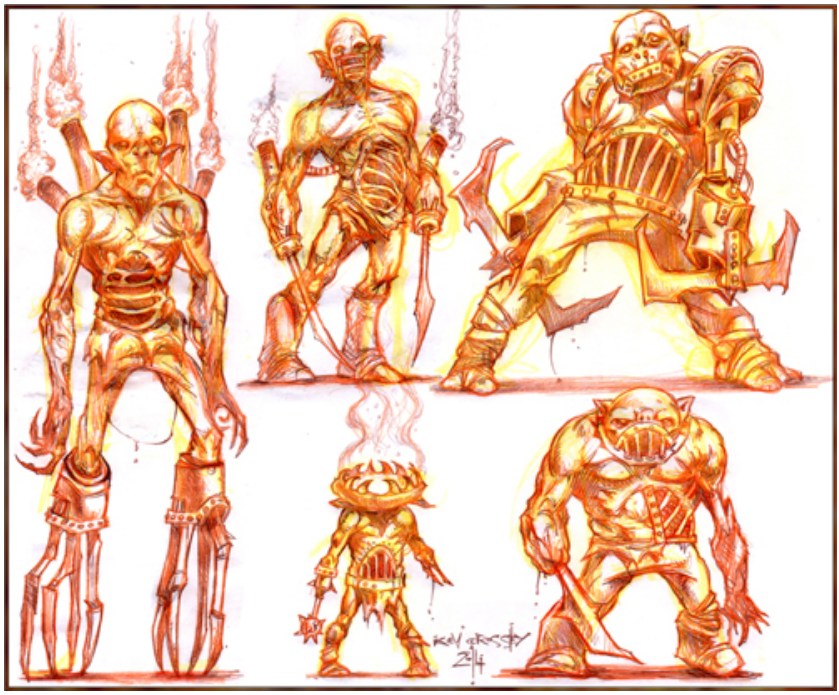


An old doodle of a fire troll.



New goblin-version sketches inspired by the troll.

As there were only two pages allocated for each of my goblin spreads, I wanted to limit myself to just one page of drawings per type. However, while sketching ideas for these fire goblins I ended up producing page after page of designs, each more bizarre than the last! I could easily have kept going but I was producing far more work than was required so I made myself put the pencils down and turn my attention instead to choosing a select few to turn into finished art. Sometimes a job might offer the luxury to create far more sketches than you see here, which in turn can generate more finished concepts, but part of being a professional designer is knowing when to move on, especially when working to a specific brief. This can be frustrating when you know there are more ideas yet to explore, but sometimes it's better to have five well-finished and presented ideas than 50 half-formed doodles!



Finished fire-goblin designs.

Vire Rider

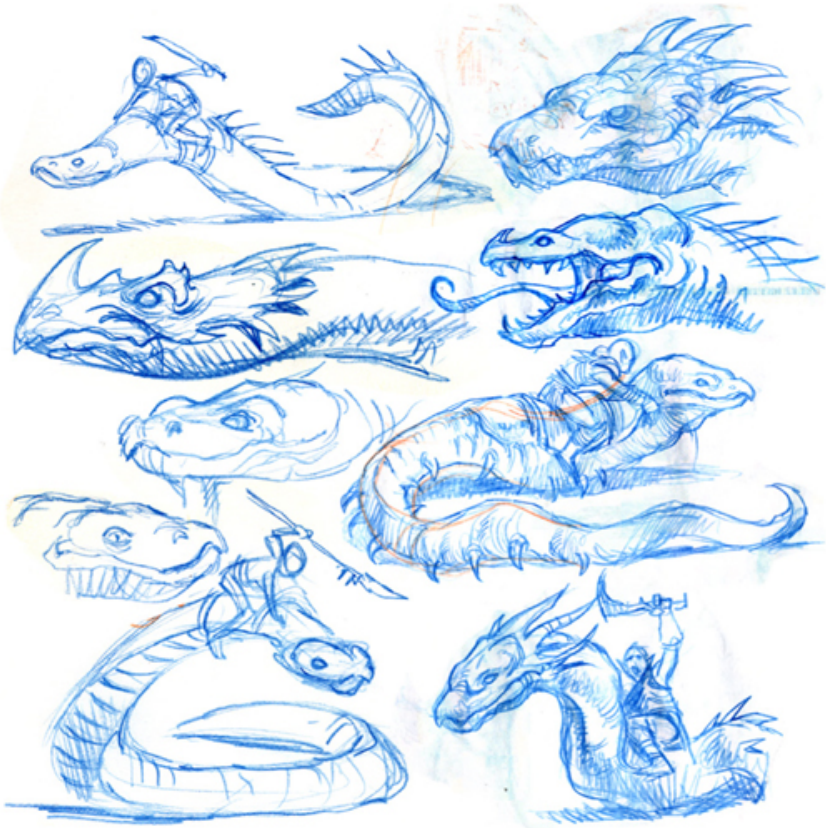
You guessed it, “vire riders” are another group of orcs from that old story. Orcs famously ride giant wolves called wargs, but I wanted my orcs to ride something different. I chose to mount them on giant snakes called vires. I’d never actually drawn these characters before, so I decided to turn them into a case study for this book. Though I always imagined it would be fairly easy to nail their look down, as I began sketching I realized an orc on a snake looked a bit, well, pedestrian somehow. It seemed a little obvious and didn’t really inspire me. I thought about making them look like legless dragons, but that felt lazy, and then I began to think about the hagfish. This ancient creature is unlike any other living animal, and with its circular, suckered mouth ringed with teeth it was the obvious choice when designing a steed for an orc. I didn’t refer to any actual photographs of the hagfish, but instead produced a few drawings from memory and added my own embellishments so that I might come up with something only slightly informed by the natural world. I gave my vire small eyes clustered all over the front of the “head” in no particular configuration, although I did give it two larger eyes, one

on each side, which I imagined would give it some sense of geotropic equilibrium. Regarding the saddle, although orcs usually ride bareback, with a glutinous, viscid vire, a rider might need something to grip to keep themselves from falling off, so I designed a very basic saddle made of bone, sinew, and hide. These are then not so much tied onto the creature as "fused" into the gelatinous flesh.

When it came to design the vire riders, I opted for a very simple concept. These orcs wouldn't wear much armor, and due to long association with their mounts, their skin would probably take on a similar texture and color to the soft-bodied creatures they ride.

I then had another idea for the orc captains. To make them stand apart from the ordinary goblins, I envisaged them riding not a single vire, but lots of them. I'd already established that vires had flesh that could fuse itself with other things, so why not other vires? So, an orc captain might fuse a number of vires together into one monstrous creature with multiple heads. The more vires in the mass, the higher ranking the orc!

I began working on the vire riders with blue Col-Erase pencils, but as I progressed I swapped to using orange, yellow, and brown instead, which seemed to better suit the character and texture of these creatures. The range of complementary hues was also helpful in quickly creating volume and body in the drawings.



A sketch page of orcs riding snakes.



On this page the snakes began to resemble eels or hagfish.



The vire-rider orcs themselves are smooth skinned and mostly hairless.



The final concept design of a vire rider.



When vires are strapped together, their skin fuses to form a hideous, pulsating mass of muscle with multiple heads.

Horror: Judge Death

For each case study in this projects section, every design brief or problem has been presented with a solution or conclusion at its end. For this, the very last case study and final chapter in the book, I've decided to leave it open-ended. There is no final design arrived at through a process of trial and error or well-considered intent. Instead I'd like to structure the following chapter as if it was simply showing the results of an average afternoon spent sketching new drawings inspired by old ones. As the subject here is Judge Death, I'd simply like to explore and have a bit of fun with as many variations and alternate ideas for the character as I can!



The superb, creepy version of Death, painted by Dave Kendall.

Judge Death made his first appearance in 1981, in the popular British sci-fi anthology comic *2000 AD* as a terrifying new villain for Judge Dredd to battle. He was a perversion of everything Judge Dredd stood for, twisted to an extreme of logic. As all crime is committed by the living, so make life itself a crime—execute everyone guilty, and no-one left alive means no more crime! Now, like any budding artist reading *2000 AD* as a kid, I made several attempts at designing my own dark judges over the years, but as Brian Bolland's original design was so outstanding it was difficult to stray too far from that template. Nevertheless I thought it might be fun to try again and I set my mind to the task.

Over the past ten years I have attended many comic conventions

where I produce sketches of peoples' favorite comic characters, and the most requests I get by far are for Judges Dredd and Death. While browsing through my folders of convention sketches I found a few drawings of zombie judges that gave me an idea: What if Judge Death was actually a persona taken on by Judge Dredd from an alternate dimension? What if Judge Death WAS actually Judge Dredd, and what might Dredd actually look like if he were to become a zombie judge? I copied an idea from a Death painting I'd done, and sketched a drawing featuring a partially smashed visor revealing much more of the rotted face, including a mad, staring eye. Death really did suit Dredd after all!

A selection of Judge Death convention sketches.





Next, I thought I might have a go at coming up with some new ideas for the Judge Death uniform, or “garb of office” as the Dark Judges call it. There are elements of the character that are idiosyncratic, and have become instantly recognizable. These include his teeth, the portcullis helmet visor, and the bones/skulls that emblazon his uniform. Now, just like Dredd, the only part of Death’s face you see is his mouth (teeth!) and chin, and the way his lips curl back to expose his teeth has become an identifying attribute of the character. I quite liked the way I’d drawn the zombie Judge, so I used this as a template to do several new head studies. For the most part I kept the eyes covered, focusing on doing a series of “grill” variations. Inspired by Dave Kendall’s painting and my Death-is-

actually-Dredd-from-another-dimension idea, I did one sketch with a regular judge helmet with a fully visible, very dead looking face. The visor was removed to facilitate this, and a simple skull replaced the usual vertical bars on the front of the helmet. I even allowed a couple of cartoonish doodles into the party, but they didn't really gel with the overall vibe so I didn't pursue those any further.



Death's head sketches, take one.



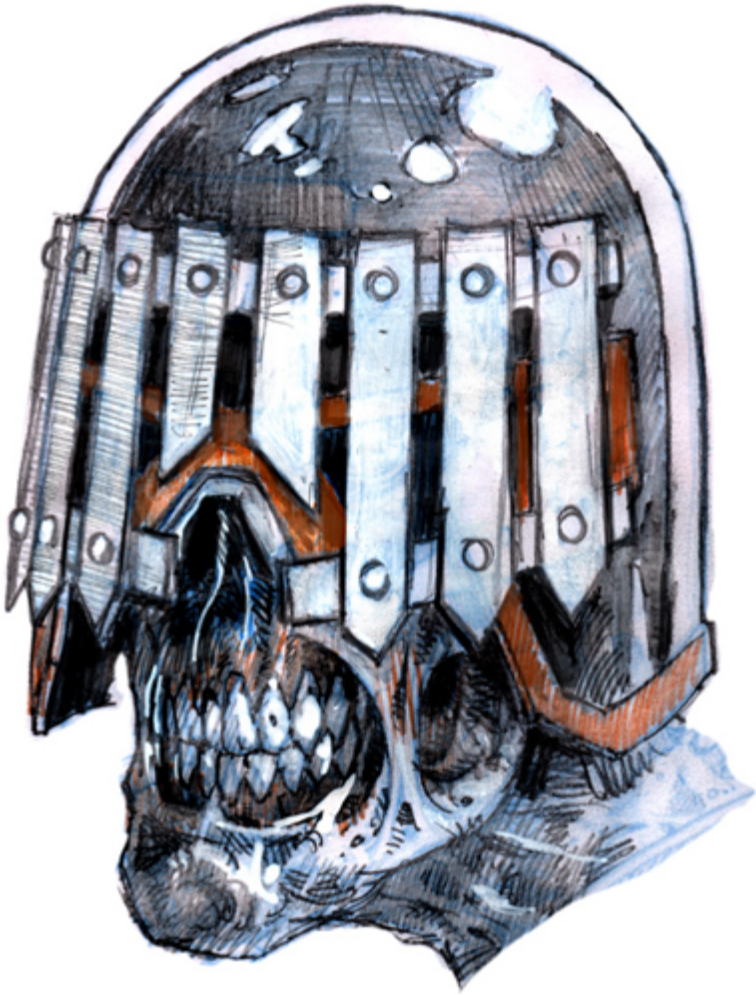
Death's head sketches, take two.



Death's head sketches, take three.

I produced a few slightly larger head studies, including one which again explored the Dredd-IS-Death concept. For this I adapted my zombie Dredd drawing, removing the visor glass but keeping the 1-horizontal/5-vertical bars badge on the front of the helmet. Then I added the idiosyncratic Judge Death visor-grill bars, as if they'd been screwed onto the battered helmet. This simple idea created a convincing hybrid between the two Judges.

I expanded on the concept of a regular Judge helmet having Death parts bolted to it in my next drawings. One simply featured an almost exact copy of the regular Judge Death grill screwed over the face, but for the other I opted for a slightly more grim idea. I was wondering what else could be used as a stand-in for the grill, and bones seemed to be a natural idea. Particularly ribs. When still attached to a section of sternum, this created a suitably nasty image (it was too small to be an adult ribcage after all), that managed to be both redolent of the classic design, but totally new, all at the same time. "Jussticcce isssss sssserved."



Dredd IS Death, take one!



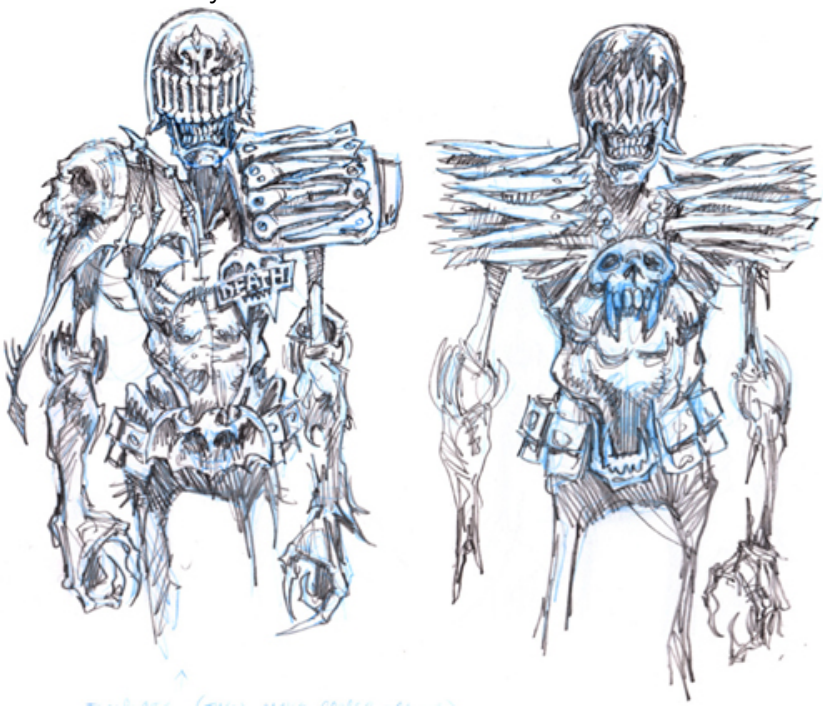
Dredd IS Death, take two!



Dredd IS Death, take three!

So, with a few Judge Death head ideas completed, I began to think about the costume. The first sketch was inspired by some old versions of the regular Judge uniform worn by the SJS Judges. (These were responsible for judging other judges.) Some of these uniforms featured a single huge eagle shoulder-pad which extended from the left shoulder down over the chest. For this version of Judge Death I replaced the eagle concept with a large skull biting into the "DEATH" name badge, flanked with bat wings. I produced a few more sketches using an old convention sketch as a template, one of which borrowed Dave Kendall's split-bone shoulder-pad idea, while the other had shoulders simply covered with shards and splinters of

broken bones.
All the new thumbnails and sketches here were done in an afternoon and evening, and show just a small example of how a concept can be adjusted, deformed and tweaked to produce an exciting range of permutations. However, with an iconic character like Death, the original is still the best, so I think it's fitting to show one last painted image of Death as he should be…
…Albeit with one eye visible!



Two more twisted takes on Death's garb of office.



An alternate uniform idea.



An acrylic painting based on a sketch I did.

Afterword

Throughout my time at high school I always knew I wanted to be an artist (the job title I created for myself was "Freelance Graphic Illustrator!"). I knew I had a lot to learn before I realized my goal, but I was lucky to have sound advice from understanding teachers, and stable support and encouragement at home. During the long and difficult time it took me to grow into the career I'd envisaged for myself, I met many other people who might have become artists or designers, but had lacked that support, guidance, and advice. In fact, quite a few had experienced open derision when they'd expressed an interest in pursuing art, and only then did I begin to appreciate just how lucky I had been. That realization gave me a new resolve to always offer honest encouragement to anyone who expressed an interest in art, and when appropriate, offer advice and help if I could.

This motive probably played a key role in the development of my writing career, which was something I would never have considered I could do! Almost all my writing is based around art instruction of one kind or another, and evolved out of the conversations and e-mails I've shared with many students and young designers over the years. During the writing of this book, I've tried to ensure the content is legible and accessible without being patronizing, as I wanted it to appeal to those coming to the subject of character design without any prior experience, but at the same time provide plenty for the more advanced designer to think about. It's a tricky balance to get right!

In November 2012, I attended an annual comic convention in my home town. My latest book, *101 Top Tips from Professional Fantasy Illustrators* had just been published, and I had a copy on my table. An eager fellow asked if he could buy my last copy, so I agreed, and threw in a sketch before I gave it to him. Then, in 2013, I made a return visit to the convention. I was sat at my table finishing a Judge Death sketch for someone when another visitor came to talk to me. "Hi Kev," he said, "I bought a copy of your *Fantasy Art Tips* book last year, and I have a present for you!" It was the man from the previous year! He went on, "I wanted to tell you how much I enjoyed it, it made me confident enough to try something I never thought I could do." He reached into a bag, and presented me with a tabloid (A3) print of a landscape painting he'd done. It was amazing. He said, "Your book

made that possible. Thanks Kev!" And he left! I was speechless. It was an indicator that how I approach my teaching and writing was perhaps on the right track, and when I get to see the fruits of other artists' labors, it vindicates my attempts to make others feel as passionate about art and design as I do myself.

So, if you got this far, I'd like to say thanks for taking the time to read what my collaborators and myself have put into this book, and I hope it inspires you to pick up a pencil or stylus and have a go yourself. And of course, I'd welcome seeing the results!



The *Little Acorn* gang head on home.



A bonus Joe Pineapples concept.



A concept design of a Saracen warrior!



And finally, this is the resulting pile of pencil shavings from a single day working on drawings for this book! I challenge you to beat this if you can!

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Resources

Further Reading

On this page, I thought I'd list some ideas for further reading, as well as advice about creative networks and other kinds of artistic support. The following books are among my favorites, providing fantastic reference, information, and inspiration. I've broken the list into two sections: instructional and inspirational—but obviously they all offer a little of each.

Instructional books:

***Strength Training Anatomy* by Frederic Delavier**

This is my favorite anatomy reference book, and it's not even meant for artists! There are numerous editions, but all feature the most amazingly well-observed illustrations of muscle groups in action, and how they deform and attach to the skeleton beneath. I cannot recommend this book enough!

The Visual Dictionary of The Skeleton

Great, full-color reference.

An Atlas of Animal Anatomy For Artists

First published in 1949, this is a definitive volume of anatomical studies, illustrating numerous animals in exquisite detail including fur, skin, muscles, and skeletons. It can be tricky to track down, but well worth it.

***Anatomy for Fantasy Artists* by Glenn Fabry**

This is a great, contemporary reference book by one of the greatest anatomical illustrators of the past 30 years. It is also the very first book to which I contributed some writing!

Inspirational books:

***Sentinel* by Syd Mead**

I have a few of Syd's books, but this was my first, and is still my favorite, filled with terrific character and vehicle design. An absolute classic.

The Art of Star Wars: Episode 2: Attack Of The Clones

There are, of course, numerous art books about the *Star Wars* movies, but this has always been my favorite. It rivals Syd Mead's books for sheer breadth of subject and design scope, and the quality of the art is never less than astonishing. A benchmark of excellence any aspiring character or concept designer would do well to emulate.

Drawing Down the Moon: The Art of Charles Vess

A collection of incredible drawings by a modern master.

Mucha's Figures Décoratives
Alphonse Mucha is best known for his exquisite color prints, but his drawing is even more beautiful, in my opinion. This volume contains some of the most incredibly sensitive and breath-taking decorative life drawing and figure studies ever produced. Every artist and character designer should own this.
***Color and Light* by James Gurney**
A recent acquisition that has proved very useful for color work. James Gurney brings a contemporary edge to classical painting techniques, and explains the topics covered using clear, concise language. A real treat!
You will no doubt develop your own preferences, but having one or two of these will be a great place to start.
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